DUN'S REVIEW
and Modern Industry

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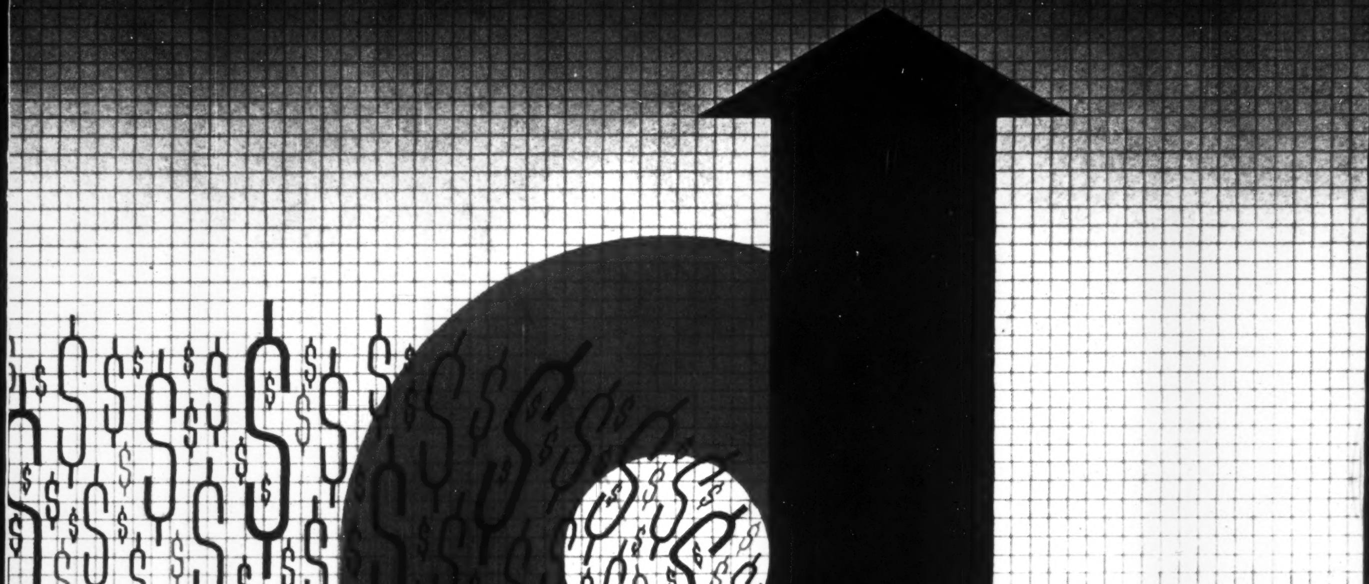

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DUN'S REVIEW
and Modern Industry

MAY
1958

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James A. Ryder

James A. Ryder
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Editorial

SURVIVAL OF THE FITTEST

SEVERAL GLUM-VISAGED economists have expressed the opinion that the productive capacity of American factories is 40 per cent idle. That kind of statistic can be misleading in its total implication. Presumably, the 40 per cent includes many "lame duck" factories, living on borrowed time, whose high costs are hidden in averages and justified only by the expansion of business in a lush period. These must be replaced by plants designed and equipped to compete in a market where no company can afford the luxury of obsolescence.

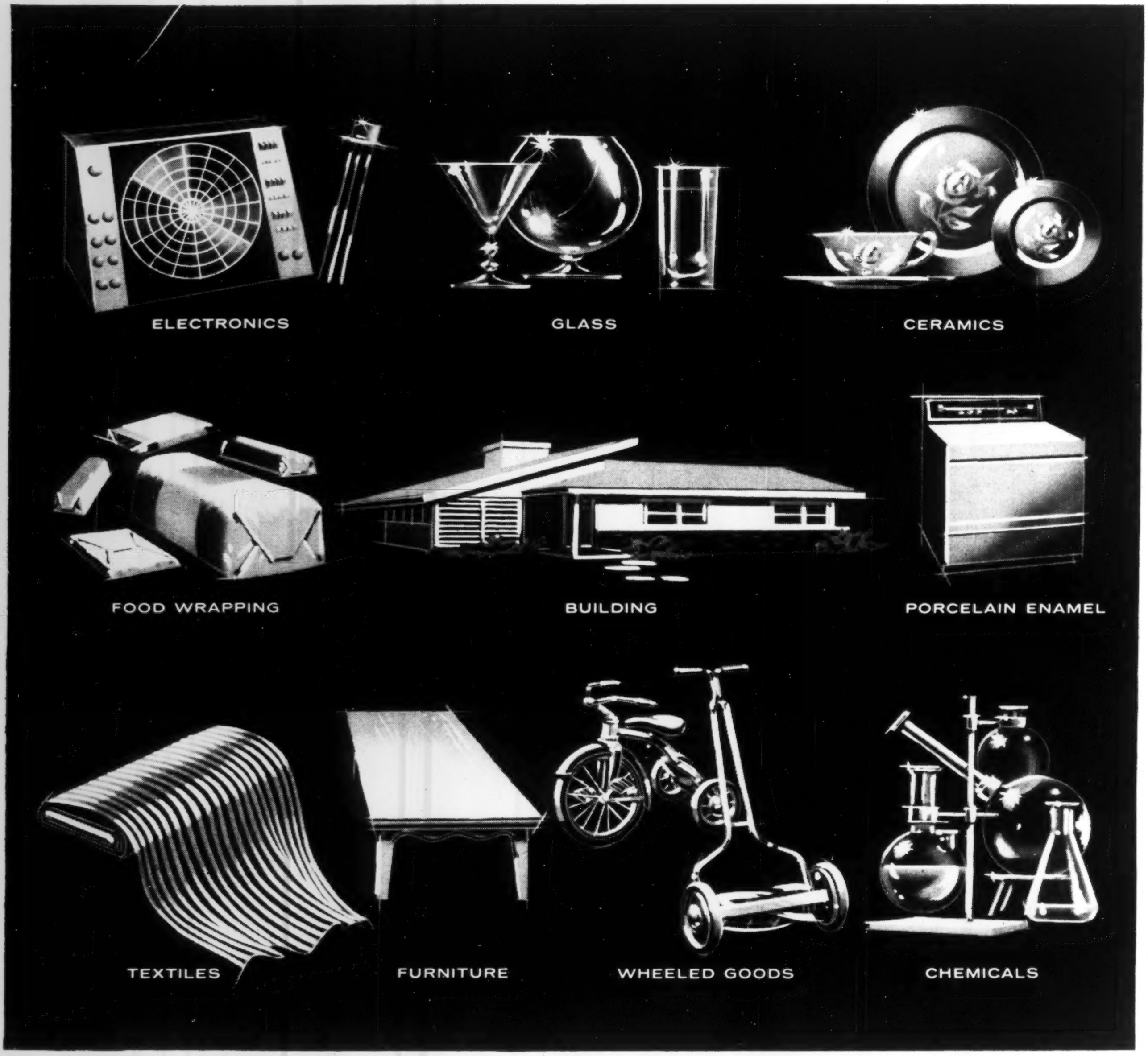
Now let's look at the other side of the question. What proportion of the 40 per cent consists of up-to-date facilities fit to meet competition? Nobody knows the answer, because the only available evidence of efficiency or obsolescence is the profit margin. The individual factory operator can better assess his own position by a rapid inventory of tools and an impartial appraisal of his plant facilities. A period of recession brings some blessings if we have the courage and imagination to make the most of the opportunity to reappraise our products, equipment, location, and personnel.

There is a right way and a wrong way to go about the job. In a lean era, we ought to be selective about people, methods, and machines. But if we attack the problem like a cane-cutter with a machete, swinging wildly at high-expense items, we may damage morale. The typical employee is aware of the situation and extremely sensitive to its consequences. The more he knows about his company's productivity trend, the quicker he relates it to profits and his pay envelope, and the more readily he will pitch in and help.

When a plant closes down briefly for inventory study, or for retooling, it usually chooses a slack season. The present lag can offer the industrial manager a chance to measure the individual value of men and machines. Where efficiency and productivity are high, the fact will stand out in bold relief. Where there is ineptness in supervisory management and sluggish machine performance, the disease and the remedy will be equally apparent.

It is not so important whether or not 40 per cent of our plant capacity is idle. What should be significant to the individual manager is the proportion of his own facilities that is lagging in the competitive race. He can't waste sentiment on obsolete factories or facilities. The price of obsolescence is often failure—which is a higher price than capital investment for new tools and factories, even at currently inflated values.

The Editors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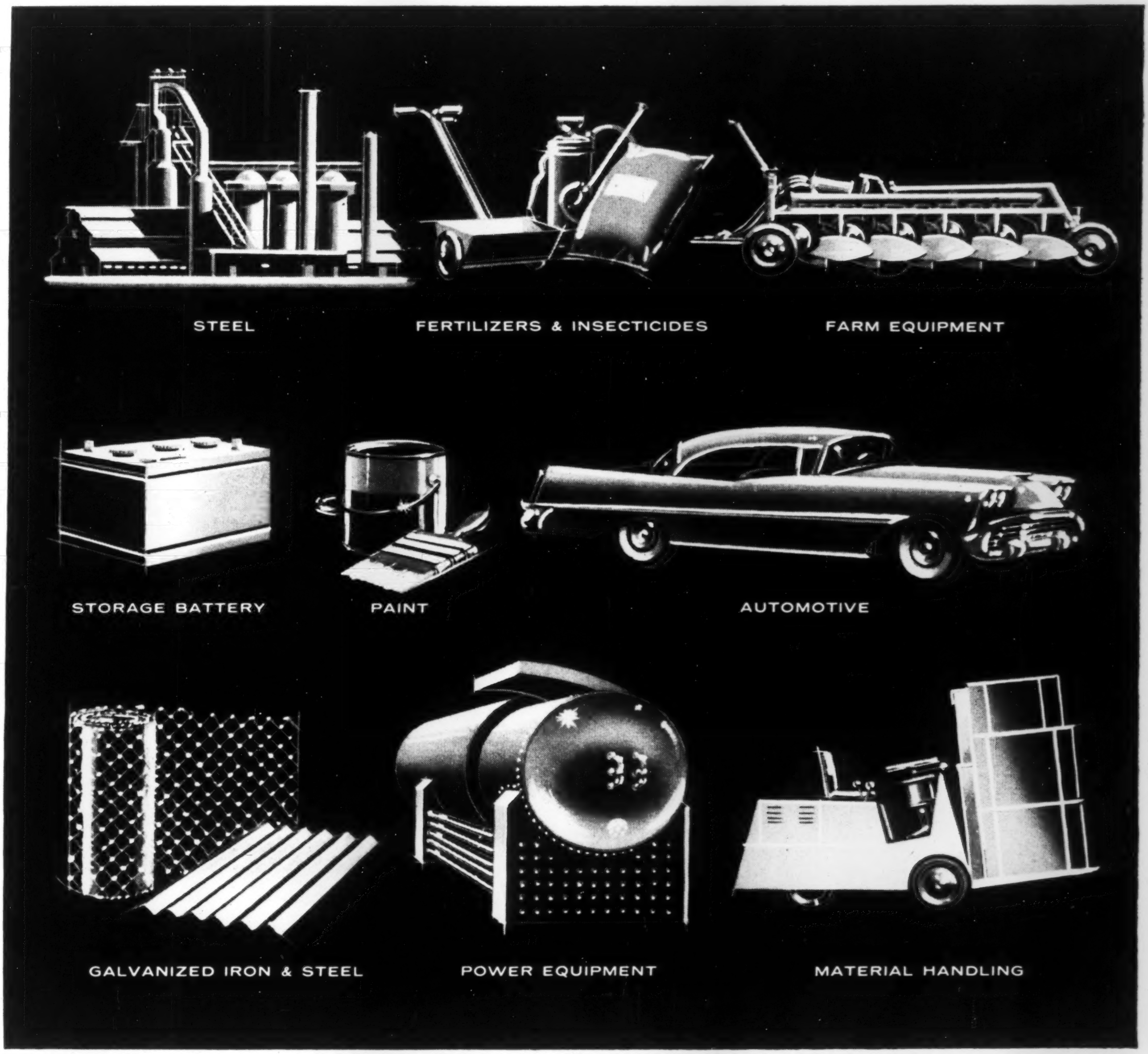
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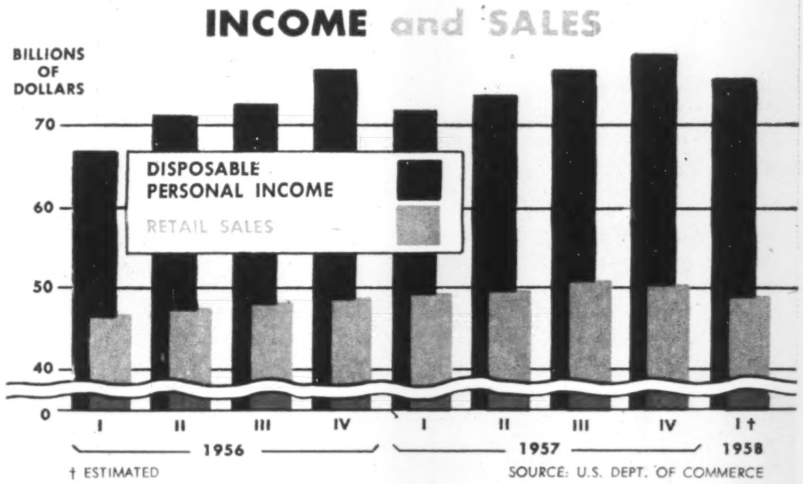


With the recent easing of disposable personal income, retail sales began to show weakness. Figures are seasonally adjusted.

▶ ***Consumer Buying***

▶ ***Prices***

▶ ***Production***

▶ ***Construction***

▶ ***Employment***

THE TREND OF BUSINESS

MIGHTY FEW business men are now expecting anything like a real upswing in the next month or two. Activity remains "bottomed out," although at a higher level than we have known in most good times.

To say that the recovery will come when consumers and business begin buying again is trite and something of an oversimplification, but it still sums up the most important truth about our immediate economic future.

Briefly, the prospects now look like this:

Consumer spending will weaken a little more and in the second quarter drop slightly below a year ago. Inventory liquidation will continue to a limited extent, but toward the end of the second quarter a slight rise in manufacturers' orders may occur.

Production will hit its low point some time this quarter and remain close to that level through most of the Summer. The moderate year-to-year dip in employment will continue, and the number of jobless will remain sharply above the year-earlier level. Total output of goods and services for the second quarter will amount to about $420 billion, a decrease of 3 per cent from the corresponding three-month period last year.

More than ever, the consumer is the center of attention in the business picture. Business men, economists, and Government officials are scrutinizing consumer buying as a prime indicator of whether business activity will decline further, continue at current levels for some time, or soon rise significantly.

Consumers holding back

Over the next month or so shoppers will probably be discouraged by continued high prices in many lines and by unpleasant business news. This was what happened during the Easter selling season. Of course, retailers attributed much of the slight year-to-year lag in Easter trade to bad weather and this year's early Easter, but just now consumers seem to be a little more interested in adding to their savings and a bit more selective in their buying.

Most households are apparently well stocked with hard goods. When some manufacturers abandoned fair trade, the resultant retail price reductions boosted sales of small electric housewares in some regions. But volume in major appliances, television sets, and furniture showed no improvement in March and early April. The usual increase in sales of hardware, building materials, and garden implements occurred, but purchases did not match those of a year ago.

Some heartening news was found in reports on late March and early April auto sales. Although volume in new passenger cars was again sharply below that of last year during the last nine selling days of March, over a span of one-third of a month sales were at the highest level so far this year. According to some industry officials, extensive sales promotions accounted for the increase. For the first quarter of this year, dealers' sales ran about 28 per cent below those of the similar 1957 period. Volume in April, May, and June will decide whether or not 1958 will be a 5-million-car year.

Since sales of apparel did not come up to most retailers' expectations, many stores planned to extend sales promotions on Spring merchandise throughout most of April. However, most stores were bustling during the final pre-Easter week, which offset in part the effects of the bad weather earlier in the Easter selling season.

A more than seasonal decline in instalment debt halted a more than three-year rising trend. Much of the decline reflected sluggish auto sales during the month.

High prices

In contrast to the decline in over-all business activity, the cost of living continued to go up. Increased costs of food, housing, and home furnishings lifted the Consumers' Price Index to 122.5 in February, a new high, 3 per cent over a year ago (1947–49=100; U.S. Bureau of Labor Statistics Index). Some Government officials predict that consumers can look forward to lower food prices soon and further reductions in costs of both hard and soft goods.

As manufacturing and trade sales slipped, inventory liquidation continued. Despite four months of very gradual reduction, the book value of manufacturers' durable goods inventories was higher in relation to sales at the end of February than at any time since the reduction began last November. It was also higher in relation to sales than at any time in either of the other two postwar economic setbacks.

Manufacturers were encouraged by reports that new orders have recently declined only slightly. A rise in contracts for electrical machinery and aircraft companies offset small declines for some other major durable goods manufacturers.

Bookings in the machine-tool industry during the first quarter of this year will show substantial improvement over December's eight-year low. Orders in February were 18 per cent above January's total and 23 per cent over December's. March orders were expected to continue up, according to the Machine Tool Builders Association. Despite sharp year-to-year declines, many business men consider this an indication that many companies are planning either to expand capacity or to replace old equipment in the months to come.

Dip in capital expenditures

The decline in plant and equipment expenditures that began in the fourth quarter of 1957 will continue into the second half of this year, according to a joint survey conducted between late January and early March by the U.S. Department of Commerce and the Securities and Exchange Commission. The seasonally adjusted annual rate in the first quarter of 1958 was estimated at about $34.1 billion. In the second quarter it is expected to be $32.6 billion compared with the record $37 billion for all of 1957. Except for public utilities, all major industries plan to reduce their outlays in 1958 compared with 1957.

Output sags

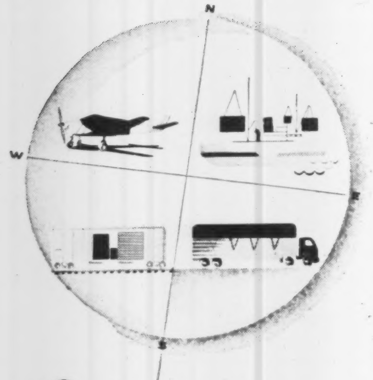
Despite a moderate improvement in late March and early April in bookings from the construction industry, over-all volume of incoming steel orders lagged. Orders from automobile producers and makers of major appliances were especially disappointing. Although some steel men anticipate a slight rise in May and June, no substantial gain in new orders is expected before Fall.

Steel producers have reduced their

WEEKLY BUSINESS SIGNPOSTS

	Latest Week	Previous Week	Year Ago
STEEL INGOT PRODUCTION. . Ten thousand tons (a)	127	129	227
ELECTRIC POWER OUTPUT. . Ten million KW hours (b)	113	113	117
BITUMINOUS COAL MINED. . Hundred thousand tons (c)	70	62	99
AUTOMOBILE PRODUCTION. . Thousand cars and trucks (d)	90.3	101.2	141.6
DEPARTMENT STORE SALES. . Index 1947–1949 = 100 (e)	103	125	122
BANK CLEARINGS, 26 Cities. . Hundred million dollars (f)	24.2	19.3	22.0
BUSINESS FAILURES. . Number of failures (f)	346	342	302

SOURCES: (a) Amer. Iron & Steel Inst.; (b) Edison Elect. Inst.; (c) U.S. Bureau of Mines; (d) *Automotive News*; (e) U.S. Bureau of Labor Statistics; (f) DUN & BRADSTREET, INC. Steel data for the fourth week of April; automobiles and failures for the third week; all others for the second week.



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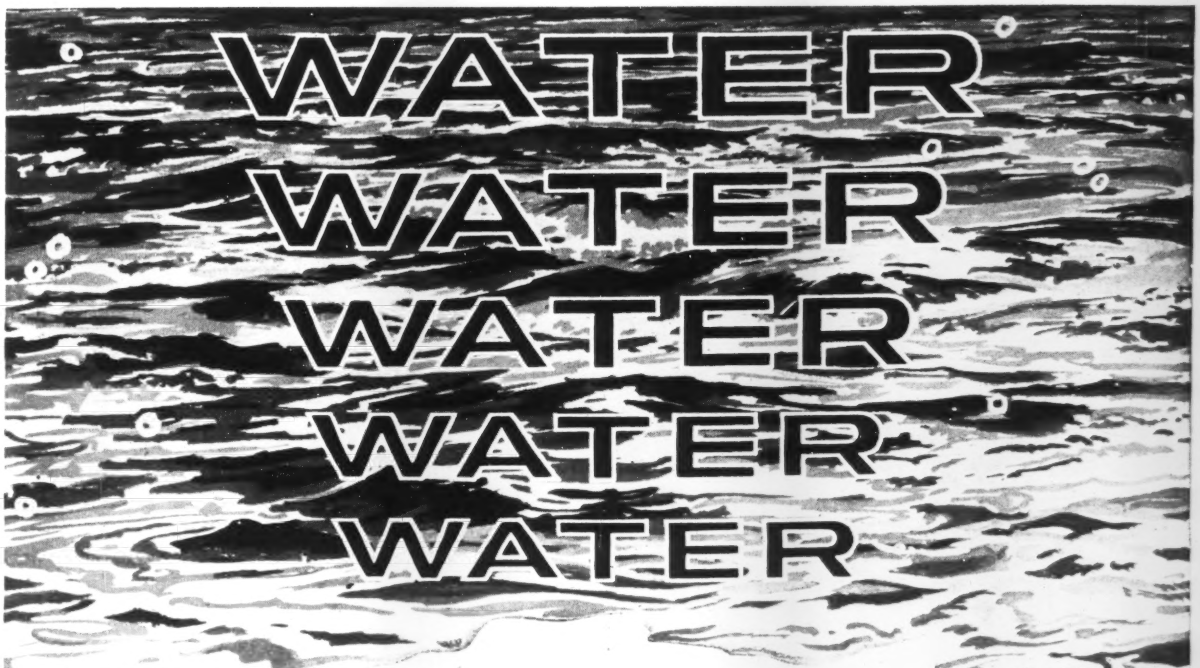

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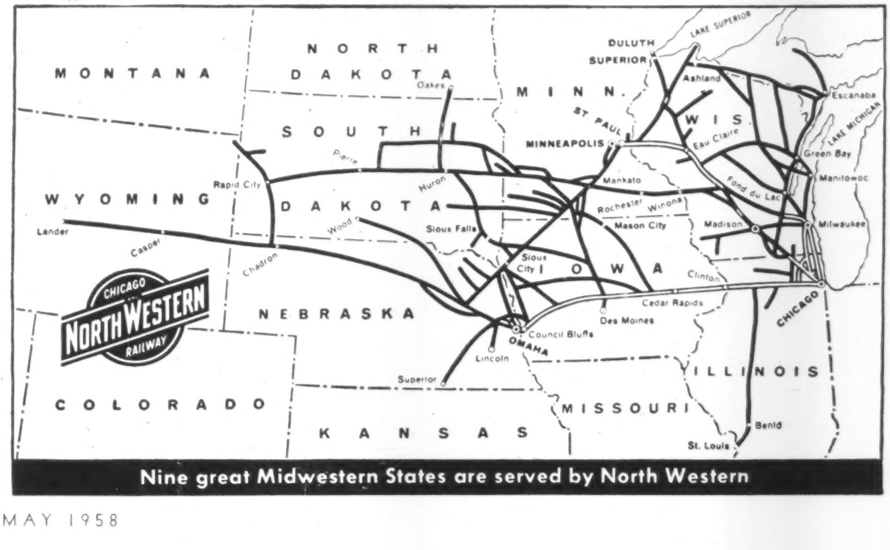
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workweek, and some plants have been shut down. Ingot production during the first quarter of this year was at the lowest level for a non-strike quarter since the second quarter of 1946, and it dipped even further in early April.

The total production of passenger cars in March was at the lowest level for that month since 1948. As a result of this and the sales improvement, dealer inventories on April 1 were down slightly from those of March 1.

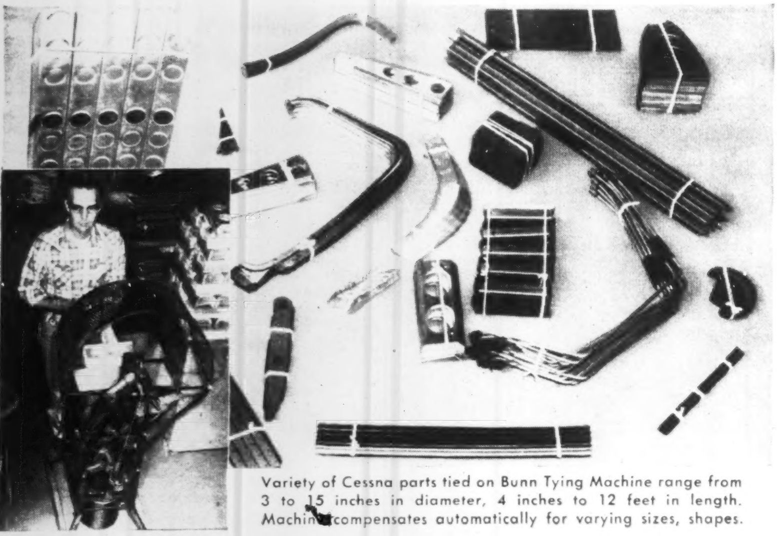
Much depends, of course, on how dealers' sales run this Spring, but in the second quarter passenger car production is scheduled to decline somewhat below the curtailed level of the first three months, and output for the year is currently set for slightly under 4.8 million units. If sales continue to improve appreciably, production schedules will undoubtedly be revised upward. This is even more likely to happen if negotiations between the leading auto companies and the United Auto Workers are successful.

Power . . . FRB . . . houses

While petroleum production held steady in March and early April, its averaged about 20 per cent below a year ago. During the last week in March, gasoline stocks fell from the prior week for the first decline in several months. The largest year-to-year decrease in electric power output in twelve years occurred in the first week of April.

In March the Federal Reserve Board's seasonally adjusted production index fell two points, to 128 per cent of the 1947–49 average. This is a decline of about 13 per cent from the peak of December 1956. During the 1953–54 setback, the index hit a low point of 123 in March and April of 1954, rose somewhat in May and June, but returned to 123 in July and August, and then climbed steadily for the rest of the year. This was 10 per cent below the peak reached in July 1953. The current decline in over-all output is more severe than in 1953–54. The index will probably slip further between now and July.

In March there was evidence of a Spring pick-up in consumers' house-buying plans. March applications for Federal Housing Administration mortgage insurance for new dwelling units rose to 24,968 from 23,368 in February and exceeded the 22.198 in



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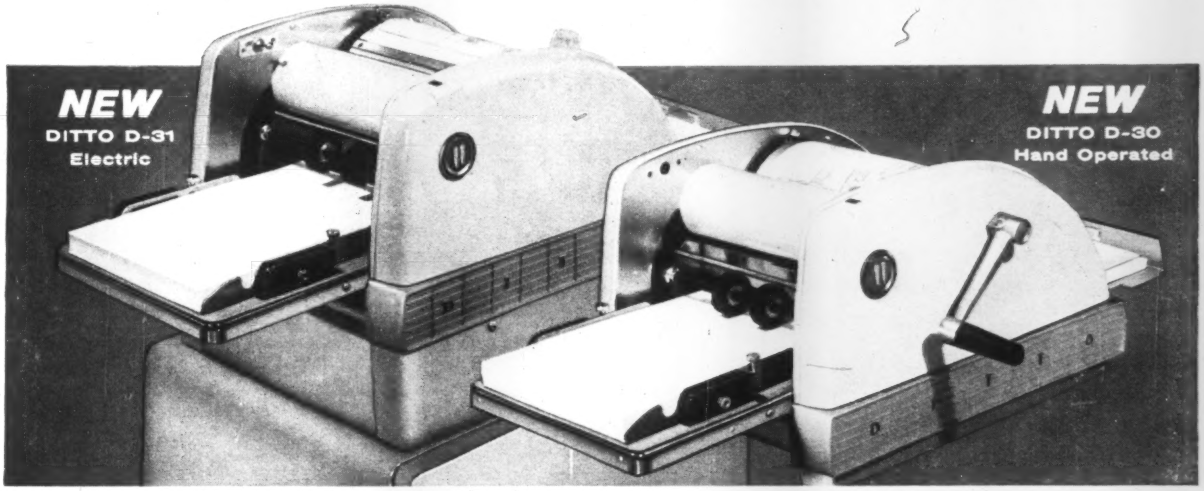

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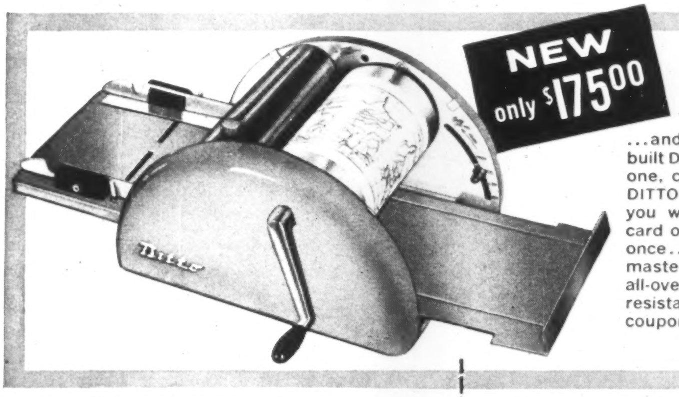

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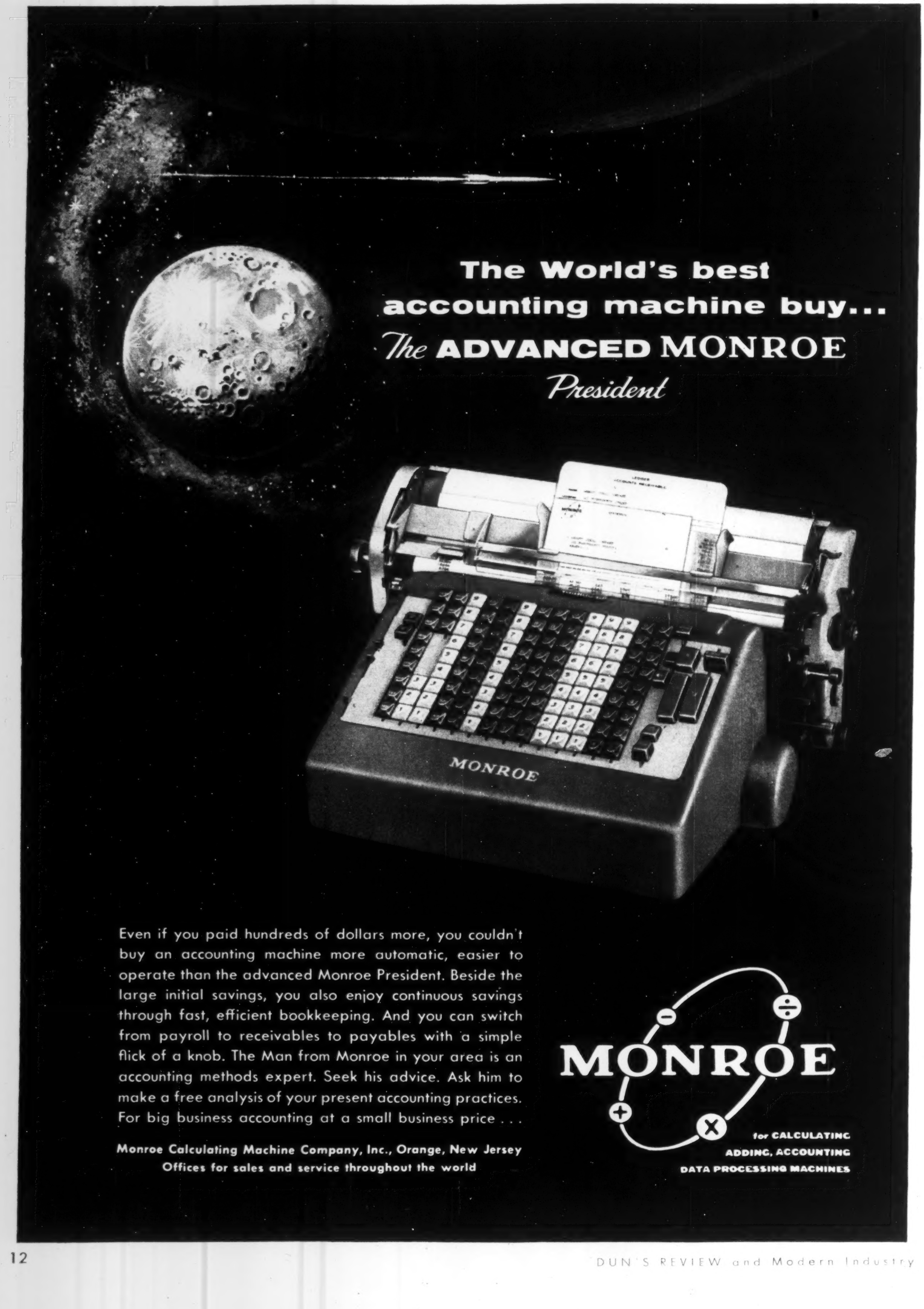

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March 1957. Many consider this a prime indicator of the future pace of new house building. The total was the highest since August 1955. New housing in the months to come may be stimulated by end-of-March legislation abolishing the 2 per cent down payment on GI home loans. Some Government officials expect this action to boost housing starts in 1958 back up to about 1.1 million.

The dollar value of new construction put in place during the first quarter amounted to $9.7 billion, slightly above the same three months of 1957. However, due to higher costs, the physical volume probably showed no year-to-year increase. Awards for heavy civil engineering construction contracts climbed 19 per cent in March over February and were nearly 50 per cent higher than the low point reached in December, according to *Engineering News Record*. The increase was attributed to rises in public and private housing and in commercial construction.

Employment edges up

A seasonal improvement in agricultural employment offset the effects of the continued lull in industrial production, lifting total civilian employment to 62.3 million in March from 62 million in February. Although the number of jobless remained at 5.2 million, the seasonally adjusted percentage of the unemployed in the labor force rose to 7 per cent from 6.7 per cent a month earlier. However, this increase in the March unemployment rate was noticeably less than the increases recorded in the previous two months. Wage and salary totals, seasonally adjusted, are about 4 or 5 per cent below the late Summer peak, but employment benefits and so on are making up about a third of these totals.

For the rest of 1958, Government outlays on all three levels—Federal, state, and local—are certain to exceed noticeably those of last year. Officials will probably wait to appraise business activity during the Spring months before suggesting additional stimulants for the economy.

This is a report prepared in the Business Economics Department, DUN & BRADSTREET, INC., by John W. Riday.

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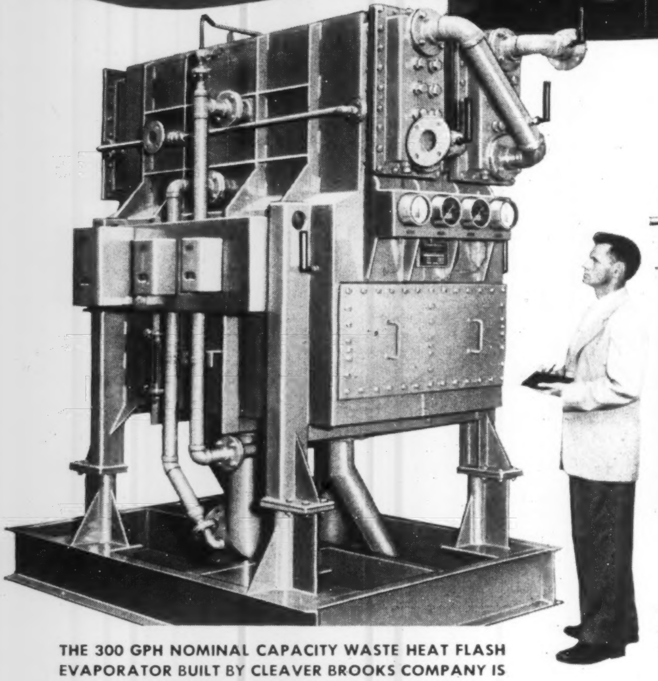
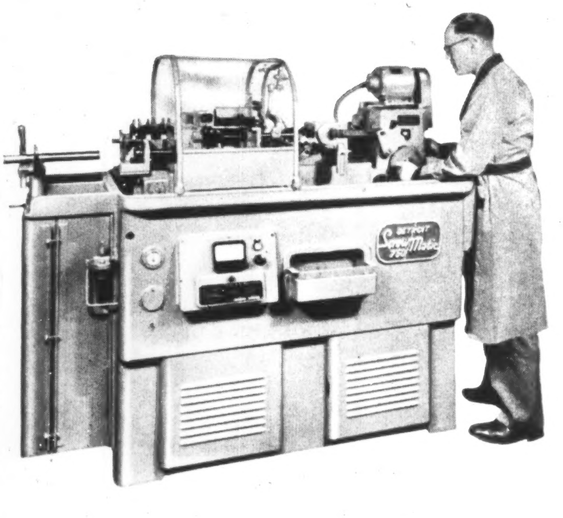
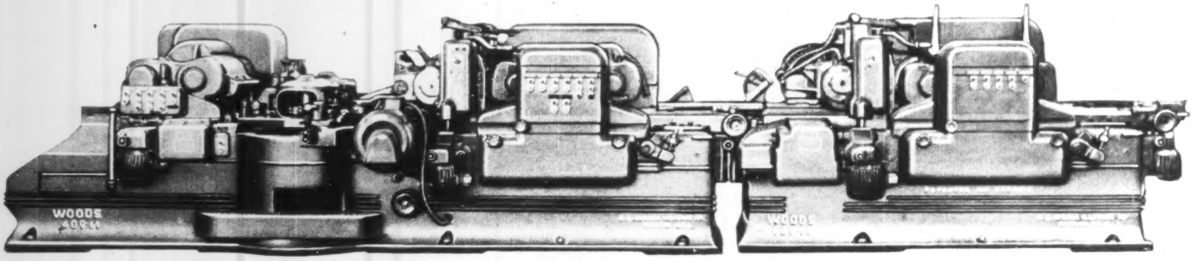


THE 300 GPH NOMINAL CAPACITY WASTE HEAT FLASH EVAPORATOR BUILT BY CLEAVER BROOKS COMPANY IS EQUIPPED WITH CUTLER-HAMMER THREE-STAR MOTOR CONTROL AS ORIGINAL CONTROL EQUIPMENT.



THE DETROIT SCREWMATIC 750 MANUFACTURED BY THE GEAR GRINDING MACHINE COMPANY INCLUDES CUTLER-HAMMER THREE-STAR MOTOR CONTROL AS ORIGINAL FACTORY EQUIPMENT.



THE S. A. WOODS MACHINE COMPANY 409M STREAMLINED FAST FEED HEAVY DUTY PLANER AND MATCHER COUPLED WITH THEIR 469M HEAVY DUTY BLANKER IS EQUIPPED WITH CUTLER-HAMMER THREE-STAR MOTOR CONTROL AND OIL-TIGHT PUSHBUTTONS.

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FAILURES: *Totals Continue to Climb*

SURGING UP 21 per cent in March, business failures reached a new postwar high of 1,495. Only once in the last 25 years, in January 1939, has the total topped this figure. But the rise is largely a reflection of the growth in population in the 1933–1958 span. The significance of the increase diminishes considerably when the number of failures is related to total concerns in operation.

Casualties were occurring this March at an annual rate of 60 per 10,000 listed enterprises, as shown by DUN'S FAILURE INDEX. While the current rate, the highest in the postwar period, came close to the 1940–1941 level, it remained moderately below the rate of 72 per 10,000 concerns in 1939 and was little more than half the rate of 109 in 1933.

Dollar liabilities did not climb so sharply as the number of failures, but they also reached a postwar peak. At $71.6 million, they bulked 10 per cent above February. Meaningful comparisons with earlier years require adjustment for the changing value of the dollar and appraisal in terms of total volume of business. For instance, failure liabilities of $615 million in 1957 are less formidable when measured against total manufacturing, wholesaling, and retailing sales of $676 billion in the same year.

In March, more concerns in all functions succumbed than in February. Commercial service and manufacturing suffered the most severe month-to-month increases. While construction failures continued below the previous year's level for the fourth consecutive month, other groups suffered more casualties than in March 1957. Increases ranged from 12 per cent in retailing to 22 per cent in services.

Manufacturing failures ran heavier than at any time since 1939. The total climbed sharply in the leather industry, and appreciable increases also occurred in the heavy industries. In wholesaling, there was a noticeable jump in the building-materials trade, but slight change from a year ago in other lines. Retail failures edged up in all trades except food, drugs, and building materials. About a third more automotive-group retailers failed than a year ago.

FAILURES BY DIVISION OF INDUSTRY

(Current liabilities in millions of dollars)	Number 3 Months 1958	Number 3 Months 1957	Liabilities 3 Months 1958	Liabilities 3 Months 1957
MINING, MANUFACTURING	708	635	72.6	67.3
Mining—coal, oil, misc.	22	21	3.5	4.8
Food and kindred products	50	44	3.6	3.7
Textile products, apparel	147	149	9.4	10.1
Lumber, lumber products	116	120	10.3	6.6
Paper, printing, publishing	44	36	3.2	1.6
Chemicals, allied products	11	15	0.3	1.6
Leather, leather products	36	17	5.4	2.6
Stone, clay, glass products	19	17	2.5	0.8
Iron, steel and products	40	32	3.6	18.9
Machinery	79	71	4.7	7.5
Transportation equipment	21	18	9.3	1.4
Miscellaneous	123	95	16.6	7.6
WHOLESALE TRADE	383	318	19.7	17.6
Food and farm products	89	73	3.9	6.2
Apparel	25	15	1.3	0.8
Dry goods	13	6	0.4	0.1
Lumber, bldg. mats., hdwre	54	36R	4.8	1.9R
Chemicals and drugs	9	12R	0.2	0.3R
Motor vehicles, equipment	19	20R	0.4	1.2R
Miscellaneous	174	156	8.7	7.1
RETAIL TRADE	2088	1852	67.4	50.5
Food and liquor	284	304	6.5	6.1
General merchandise	81	83	3.7	3.7
Apparel and accessories	378	331	12.1	6.5
Furniture, furnishings	291	278	12.6	10.0
Lumber, bldg. mats., hdwre	142	123	5.3	4.2
Automotive group	290	200	12.4	5.2
Eating, drinking places	388	331	9.6	8.5
Drugstores	34	43	0.7	1.6
Miscellaneous	200	159	4.5	4.6
CONSTRUCTION	555	562	30.5	29.5
General bldg. contractors	235	224	17.7	17.0
Building subcontractors	288	301	10.9	9.5
Other contractors	32	37	1.9	3.0
COMMERCIAL SERVICE	278	263	11.1	10.4
TOTAL UNITED STATES	4012	3630	201.3	175.3

Liabilities are rounded to the nearest million; they do not necessarily add up to totals.

R Revised

THE FAILURE RECORD

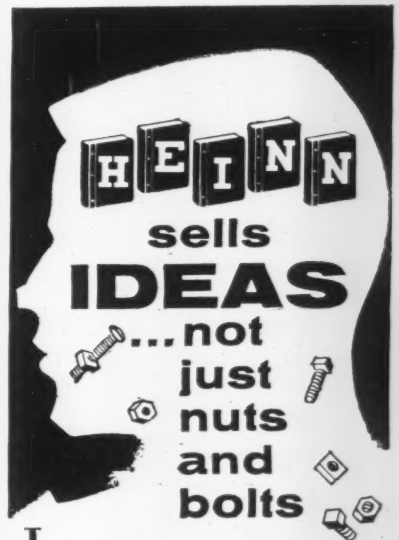
	March 1958	Feb. 1958	March 1957	% Chg.†
DUN'S FAILURE INDEX*				
Unadjusted	64.8	63.3	58.7	+10
Adjusted, seasonally	60.0	54.1	54.9	+ 9
NUMBER OF FAILURES	1,495	1,238	1,336	+12
NUMBER BY SIZE OF DEBT				
Under $5,000	173	163	183	− 5
$5,000–$25,000	692	586	698	− 1
$25,000–$100,000	477	364	344	+39
Over $100,000	153	125	111	+38
NUMBER BY INDUSTRY GROUPS				
Manufacturing	281	208	239	+18
Wholesale trade	141	112	121	+17
Retail trade	750	662	672	+12
Construction	202	177	205	− 1
Commercial service	121	79	99	+22
LIABILITIES (in thousands)				
CURRENT	$71,555	$65,295	$55,833	+28
TOTAL	71,699	65,652	56,175	+28

*Apparent annual failures per 10,000 enterprises listed in the DUN & BRADSTREET *Reference Book*.

†Percentage change, March 1958 from March 1957.

In this record, a "failure" occurs when a concern is involved in a court proceeding or in a voluntary action likely to end in loss to creditors. "Current liabilities" here include obligations held by banks, officers, affiliated and supply companies, or the governments; they do not include long-term publicly held obligations.

This report was prepared in the Business Economics Department, DUN & BRADSTREET, INC., by Rowena Wyant.



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Heard In Washington

WASHINGTON, D.C. – The recession dominates the Washington scene. Issues that were in the forefront a few months ago have been pushed into second place. Naturally, some of the interest is stimulated by political considerations. Even so, the business situation has become the chief concern of Government, trade associations, labor unions, and professional societies. If every proposed anti-recession measure were adopted, it would be inflation that would be just around the corner. Of course, many proposals are getting more support than they would if this were not an election year. But the Administration, which bears a heavier load of responsibility than the opposition, has let it be known that it will not hesitate to use the veto.

Despite the President's belief that Government dollars cannot be relied upon to bolster the economy, he is expected to approve various measures that will require large appropriations. But except for highway construction, he will probably insist on limiting public works expenditures to projects that are ready to go. Educational aid is regarded with favor, and so is an increase in unemployment benefits. These outlays will probably necessitate a further rise for the debt ceiling.

Over-all, Congress accomplished more in the first four months of this session than had been expected. Because of the campaign, Congress would like to adjourn early. But with reciprocal trade, taxes, foreign aid, aids to education, labor legislation, railroad relief, reorganization of the Defense Department, and other measures likely to involve long debate all on the agenda, the legislators will probably spend much of the Summer here. Relief for depressed areas will be debated even though final action is unlikely. Other measures with a chance of consideration before adjournment include: statehood for Alaska and Hawaii, revision of the immigration law, and a postal-rate increase.

Politicians believe people in the United States react in about the same way as those in Canada. And in Canada, promises of tax reduction seem to have influenced few votes, but Prime Minister John G. Diefenbaker's program for speeding up the development of the northern areas is popular. "Go north, young man" seems to have had as enthusiastic a reception as Horace Greeley's analogous advice a century ago.

Lack of support for tax reduction in Canada, plus Bernard Baruch's advice, is seen as a factor in the growing opposition to tax reduction in this country. It is apparent, however, that the opposition does not extend to the excise taxes. Advocates of more public works spending are also citing the Canadian elections in support of their proposals.

Many lawmakers realize that the recession was not caused by lack of buying power. They attribute the decline in demand to refusal to buy at the prices asked. If a tax reduction would result in more buying, the question of whether an increase in demand would delay price readjustments is raised. Most Congressmen, however, are willing to take a chance on that. In the meantime, business, caught between rising costs and inability to maintain sales volume at existing prices, is cutting back expansion plans.

A well defined sentiment in Congress supports the view that the consumer should get more benefit than he does from increased productivity. Lawmakers know that most of these benefits are now going only to a highly organized segment of labor, but few elected officials think they can afford to say much about that.

Restrictions on the railroads would be decidedly liberalized if the Administration could have its way. But it is doubtful whether legislation can be secured despite the urgency of the need. The Administration is convinced that it is in the public interest for the railroads to be free to compete with other methods of transportation. The Interstate Commerce Commission, it is thought, should be allowed to alter procedures in recognition of the changes that have taken place in transportation.

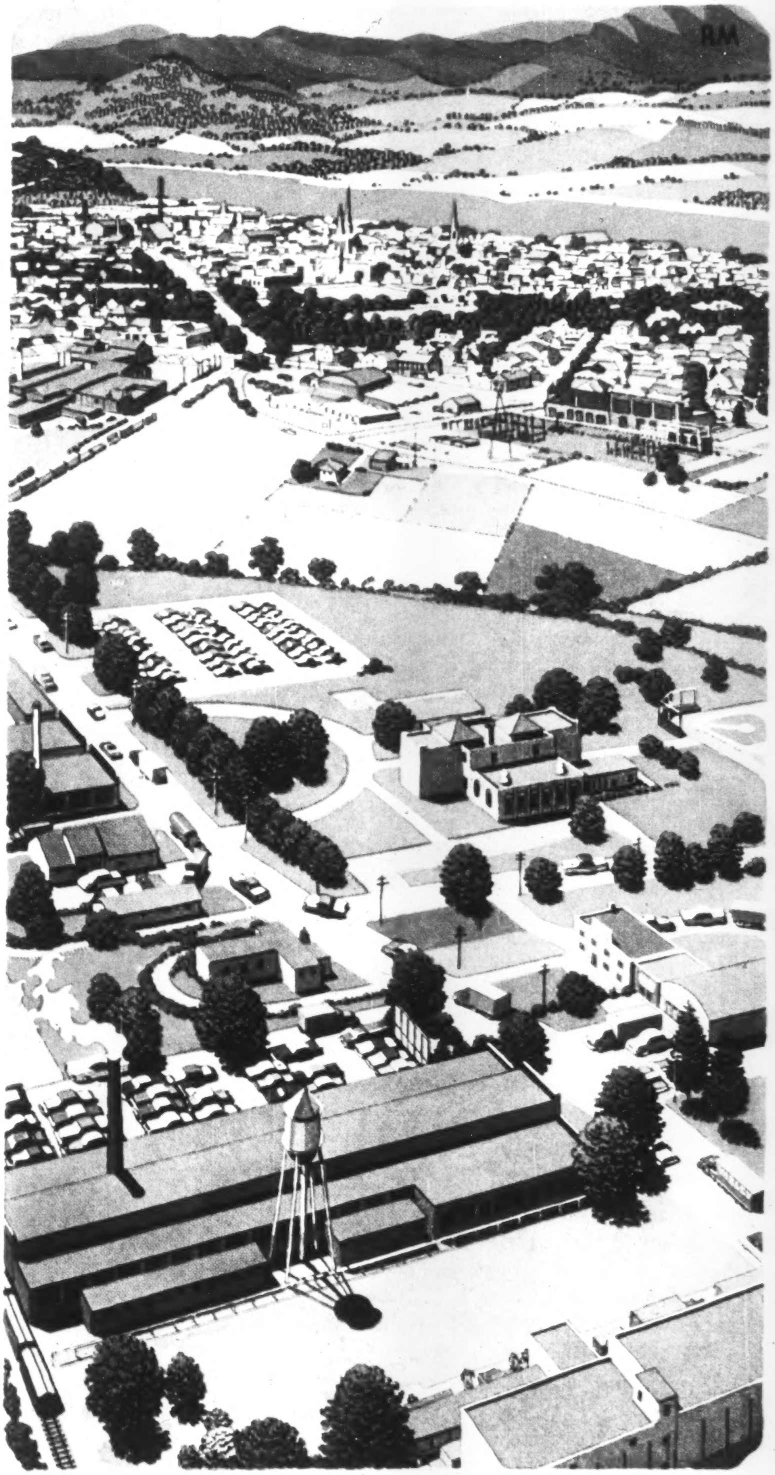
Even reorganization of the Commission itself is favored. One suggestion is that the plan of organization of the maritime agencies be followed. The Maritime Administrator is also chairman of the Federal Maritime Board. This arrangement coordinates the Maritime Administration's interest in fact finding and operation with the policy matters handled by the Board.

Failure to override the President's veto of the joint resolution freezing support prices on certain farm commodities is further evidence that agricultural interests now have less political influence than formerly. Mechanization has reduced the number of farm votes, and there is no enthusiasm for subsidizing large low-cost farming operations—the chief beneficiaries of price supports. As legislators learned while they were at home on their Easter vacation, the President's veto message made a deep impression on the public. Secretary of Agriculture Ezra Taft Benson predicts that the President's veto will "prove sound from every angle—economic, legislative, and political—" because the growth of agriculture is promoted by "freedom to produce" and not by "Government restrictions."

There is a growing impression that conditions favor a decided improvement in the farm situation. Prospects for lower nonfarm prices are encouraging. A shortage in the good grades of cotton is being felt. Furthermore, controls are increasingly unpopular with farmers.

Paul Wooton

"UPSTATE, N.Y."



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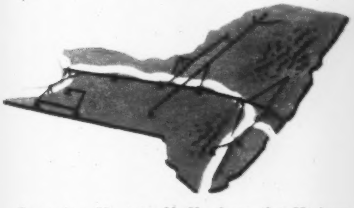

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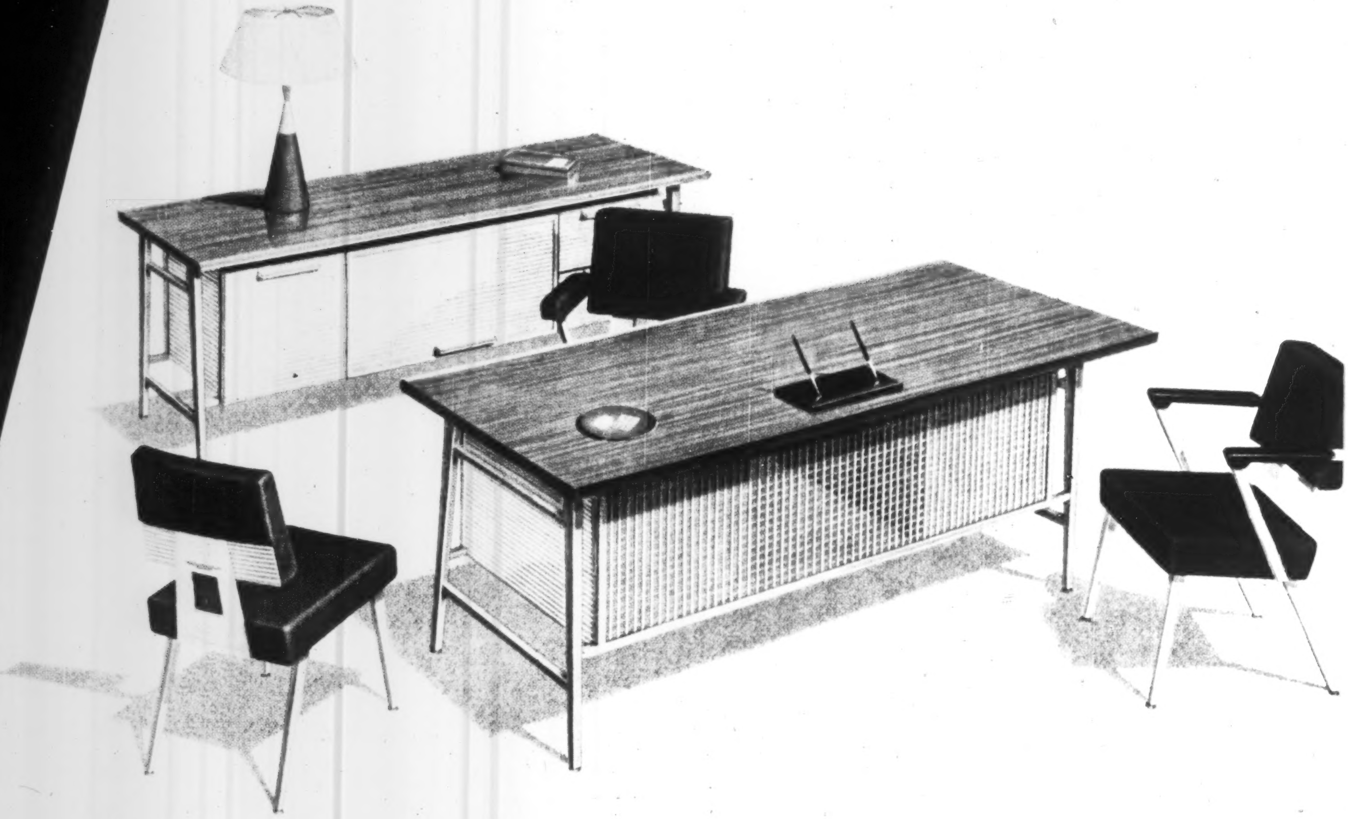

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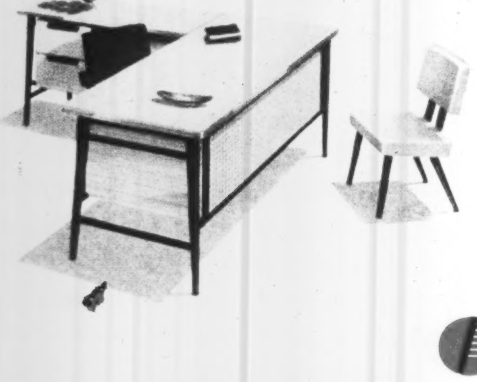

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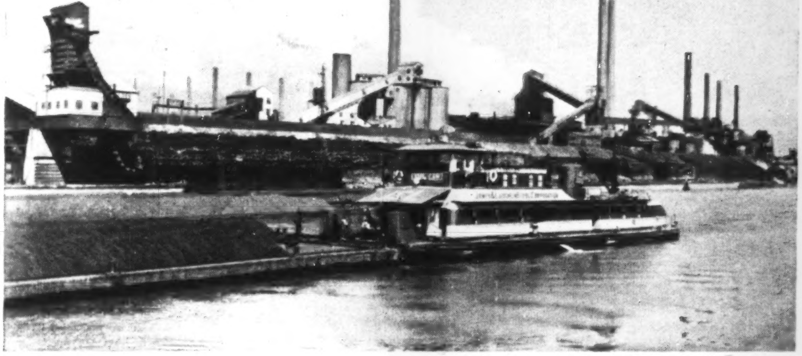

- *The Economy: 1958 Isn't 1929*
- *Perspective on Interest Rates*
- *A Management Proposal to Labor*
- *Tax Cure for Education's Ills*

TODAY'S RECESSION— HISTORY WON'T REPEAT

ROBERT C. TYSON, *chairman, Finance Committee, United States Steel Corp., before the Executives' Club of Chicago.*

Many of us remember what happened after the "New Era" of the 1920's came to a close. And many who have looked back over the long record find somewhat similar sequels to all our previous postwar reconstruction booms: what has come to be called a "secondary postwar depression." Are we again on the eve of repeating that which has been so regularly repeated in the past?

We should first note that we have not had this time, as we did in 1929, a great speculative stock market financed on thin margins. It was the collapse of bank credit engendered by the stock market collapse in 1929 which led ultimately to the great difficulties of the banks and aggravated the difficulty of doing business.

It is true that we have had, as we did in the 1920's, a great postwar housing boom financed largely with mortgage money. But things are different this time. Much of the debt is guaranteed or insured by the Government, and big lump-sum due dates have been eliminated.

These two factors alone could be sufficient to guarantee that we are not headed into another nation-wide financial paralysis such as we experienced in the 1930's.

INTEREST RATES IN NEXT DECADE

E. SHERMAN ADAMS, *deputy manager, American Bankers Association, at New York University School of Business Administration.*

The levels reached by interest rates in 1957 should not be regarded as peaks unlikely to be surpassed. Viewed in perspective, rates last year were quite moderate for a period of active business. They look high only when compared with the

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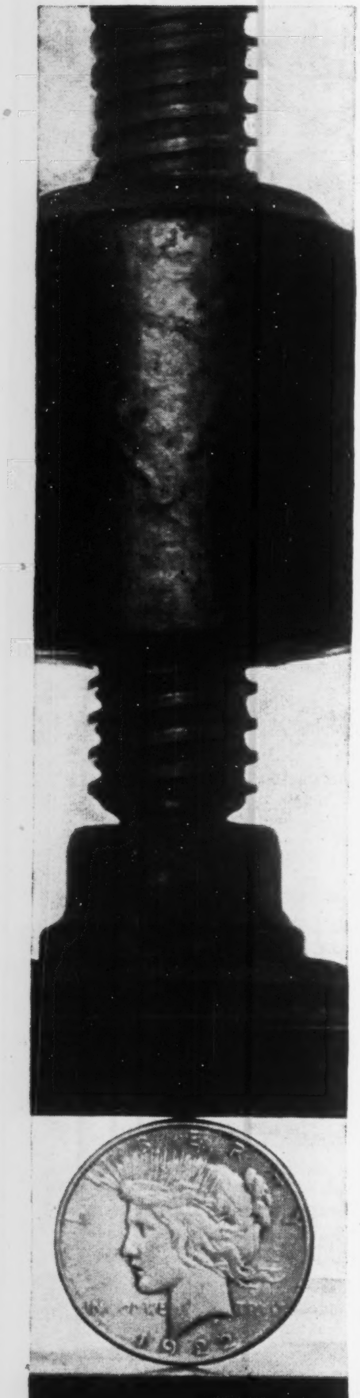

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most extraordinary period of depressed rates the world has ever seen, not when compared with those that prevailed prior to 1930.

Instead of seeking sinister reasons why interest rates rose as much as they did, we might better inquire why they stayed so low. The main answer is that the rise started from exceptionally low levels. Also, up to 1951, the Federal Reserve's program of supporting Government bond prices at par was a major deterrent to rising rates. Another reason was the effect that the long period of very low interest rates had on the thinking of the entire community.

Interest rates will certainly not go back to the starvation levels of the thirties. On the upside, given strong demands for credit, rates could easily exceed their 1957 peaks. On the average, most rates, and especially bank lending rates, should tend to be somewhat higher over the coming decade than in recent years.

PRODUCTIVITY AS A MEASURE OF WAGES

HAROLD J. RUTTENBERG, *president, Stardrill-Keystone Company, before the National Industrial Conference Board.*

Labor unions and their policies are nothing more, nor anything less, than a mirror of management's acts and policies. The leaders of industry can have it different, and better, whenever they really want it.

Management can begin to get the unions to change their collective bargaining program of more pay for less work whenever the leaders of industry are prepared to allow the unions and their members to participate with management in the job of increasing productivity.

The leaders of industry should propose to their employees and their unions:

1. To pay higher wages for more production.
2. To provide the maximum capital that our resources permit for the purchase and installation of equipment to increase production.
3. To provide the best manage-

ment that we can develop to increase production.

4. To organize practical means for all employees to cooperate with management to increase production in such a way as to release the full inherent creativeness of every human being who is a member of our managerial and operating organizations.

5. To enlarge existing, and create new, training schools for the dual purpose of (a) operating and maintaining new equipment at maximum production and (b) retraining for new positions those whose old positions have been replaced by new equipment or methods.

6. To negotiate a practical measurement of increased production so that we can pay productivity wage increases semi-annually to the extent that production has been increased. This measurement of production should give the proper weight to the components of increased production.

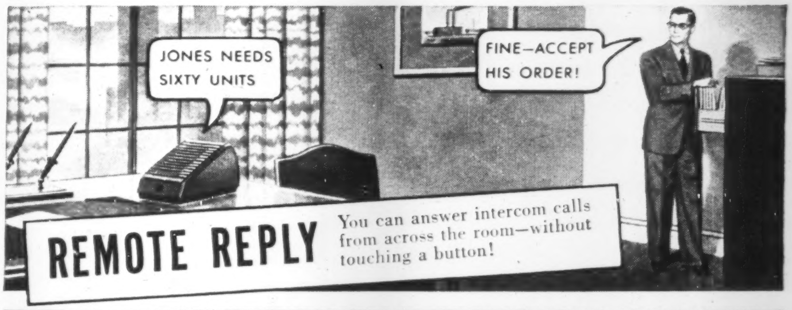
7. To pay one-half of the semi-annual productivity wage increases in direct wages, and to place the other half in a separate fund to increase fringe benefits.

AID TO EDUCATION —A NEW PROPOSAL

ROBERT HELLER, *Robert Heller & Associates, before the National Citizens Council for Better Schools.*

It becomes increasingly clear that strengthening of education is indispensable to the existence of an effective democracy in the United States. The following proposal should provide a meeting ground for advocates of greater support to education, whether they are for or against Federal aid.

The Federal Government should recognize future increases in local and state taxes by giving full credit for such increases against personal and corporate taxes. Today the Federal Government gives the nation's taxpayers a partial credit for most state and local taxes by allowing their deduction from gross income. This arrangement should be continued. But any increase in school taxes should be subtracted *in full* by the taxpayer from his Federal *tax bill.*



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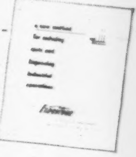

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In Canada—331 Bartlett Ave., Toronto

Here are the reasons why...

Sylvania Fluorescents give you more light—

at lower cost than all other brands!

Superior engineering makes Sylvania fluorescent lamps better in many important ways . . . makes every lamp a better tool of production and sales to increase your profits.

Today, good lighting is more than illumination . . . it is a basic tool of production and sales. Sylvania, with this important premise always at work, offers business and industry a complete line of modern fluorescent lamps that assures efficient lighting . . . provides performance that means maximum service from your present fluorescent lighting system, and a higher return on your investment in the illumination of offices, factories or stores.

Why Sylvania lamps are best

It takes many things to make better fluorescent lamps. That's why ordinary fluorescents cannot match Sylvania lamps for light output, lamp life and dollar-for-dollar lighting value.

The reason? Sylvania builds many important major features into fluorescents . . . all contributing to superior lamp service and greater lighting economy.

Check these many points of superiority. See for yourself why you get more and save more. Notice, too, that Sylvania makes its most important comparisons with other brands . . . not with Sylvania products of the past.

Sylvania fluorescent lamps are as much as 14% brighter

Tests in the laboratory and working installations demonstrate that Sylvania lamps consistently deliver more light.

Equally important, during the past two years, an actual comparison of Sylvania fluorescent lamp performance with that of other brands shows Sylvania to deliver as much as 14% more light, depending on the lamp type.

Thus, you get the maximum light you expect . . . all the light you pay for . . . from the start.

Sylvania's greater maintained brightness means 7 lamps free for every hundred you use

Sylvania fluorescents maintain their greater brightness throughout useful life. For example, at 3,000 hours, in a single-shift operation, 100 Sylvania lamps deliver the light output of about 107 ordinary fluorescents. In effect, you get a dividend of light equal to 7 free lamps . . . more light-per-lamp from the power you pay for.

Sylvania welds all bases . . . eliminates faulty lamp contact

Sylvania welds the tube-to-base contact points in all its fluorescent lamps. Other brands use soldered contacts.

By welding, Sylvania completely eliminates the corrosion caused by soldering. Faulty lamp contact so common with ordinary fluorescents is eliminated. As a result, Sylvania fluorescents burn brighter far longer . . . save dollars and time in lamp maintenance.

Only Sylvania's exclusive coating process homogenizes phosphors for maximum brightness

Year after year, Sylvania lamps have delivered more light for a far longer time than ordinary fluorescents because of superior phosphors. In fact, only now are some other brands being introduced with phosphors of a quality which Sylvania has long since improved.

SYLVANIA
40W COOL WHITE
STANDARD
MADE IN U.S.A.

In addition, Sylvania uses an exclusive coating process which more uniformly distributes these superior phosphors throughout the tube. This unsurpassed uniformity is made possible by homogenizing the phosphors—and, in itself, contributes a minimum of 3% greater brightness over other processes now in use.

Sylvania lamps are 99.9% free of performance defects

Every lamp that leaves the plant is subjected to the infallible scrutiny of electronic devices that test and inspect for every possible flaw. One unit, for example, is so critical it can detect, in a fraction of a second, a lamp leak that would otherwise not become apparent until after many months of use. In this way you are assured of the highest lamp quality and performance.

Revolutionary VHO—first lamp to give 250% as much light as a standard tube

The Sylvania VHO (Very High Output) lamp represents a major breakthrough in fluorescent lighting. It produces 2½ times the light output without changing the size or shape of the tube.

The high intensity lighting "punch" of Sylvania's VHO offers new lighting levels that make it practical for the first time to gain the advantages of fluorescent lighting for High Bay installations, and for Outdoor illumination.

VHO lamps cost less to buy—less to use, and maintain greater brightness throughout life than other types of very high intensity fluorescents.

These facts are presented in the interest of demonstrating how better lighting is possible at a lower cost . . . how it contributes to increased production and working efficiency, and supports the many factors that reduce operating costs to improve profits.

We believe this concrete evidence of Sylvania's superiority in fluorescent lighting deserves the serious consideration of every executive or purchasing authority.

If you are planning new lighting, or are about to buy fluorescent lamps for your present system, let us demonstrate why you cannot afford to buy anything but Sylvania Fluorescent Lamps. Call or write us today.

Signed, Frank J. Healy

F. J. HEALY, President

SYLVANIA Lighting Products

A Division of SYLVANIA ELECTRIC PRODUCTS INC.

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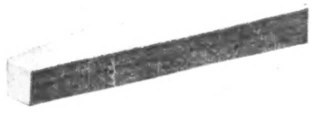
SO SHOCK-RESISTANT IT KEEPS GOLF CLUBS FROM "LOSING FACE"

Waggle . . . swish . . . *wallop* . . . 250 yards . . . smile. Meanwhile, back at the "wallop," a Vulcanized Fibre insert costing only a few pennies has saved the face of a $20 driver. Over and over again, this tiny wedge of cellulosic fibre takes the smashing 2,980 pound blow of club against ball and comes back for more. A spectacular demonstration of the strength and stubborn toughness of Vulcanized Fibre, but even more eye-opening are scores of other applications which prove this material's *unique combination* of properties. See for yourself. Send for our new kit of samples and give them your toughest tests. We'll wager you find a product improving idea—as others have been doing for 99 years

THE NATIONAL SCENE



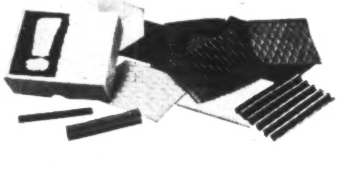
Here's the insert that takes a pounding

Yet the really impressive thing about this unique material is its almost unbelievable range of uses. For example: impact-resistant rail joint insulation for railroads; circuit breaker arc chutes; hard, glass-smooth shuttle armor and textile bobbin heads; dense, durable gears, cams and cutting blocks; lightweight, sanitary ligature reels; protective washers for hypodermic needles; flexible, tear-resistant backings for abrasive discs; oil- and solvent-proof parts of many kinds.

We take our own medicine. The light weight, glassy smoothness and long life of Vulcanized Fibre make it ideal for use in our own shock-resistant, sound-deadening Kennett Materials Handling Receptacles and Lestershire Textile Bobbins.

Among engineering materials, you'll find Vulcanized Fibre unique and surprisingly economical. It weighs only half as much as aluminum. It has outstanding arc resistance, low thermal conductivity, excellent resilience and high abrasion resistance. It absorbs sudden repeated shocks and impacts without failure. And it can even be formed or deep drawn into intricate shapes—as well as machined, polished, painted, embossed and combined with other materials, such as laminated plastic, aluminum, wood, rubber, asbestos or copper! It's available in many forms and sizes.

Send for samples today—and ask about the use of Vulcanized Fibre in any product that's giving you trouble. Dept. I-5.



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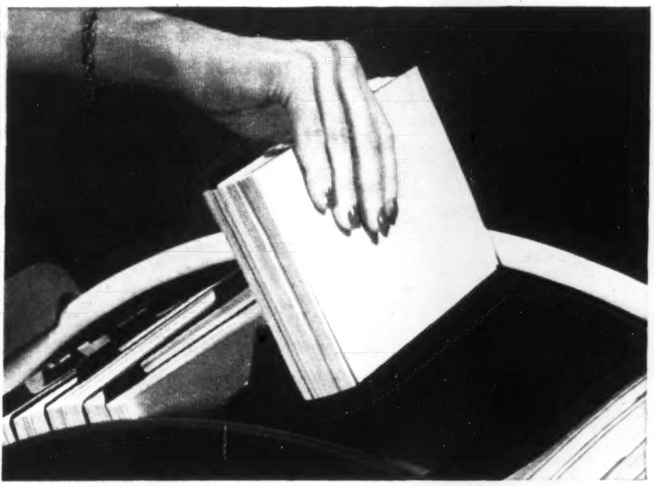
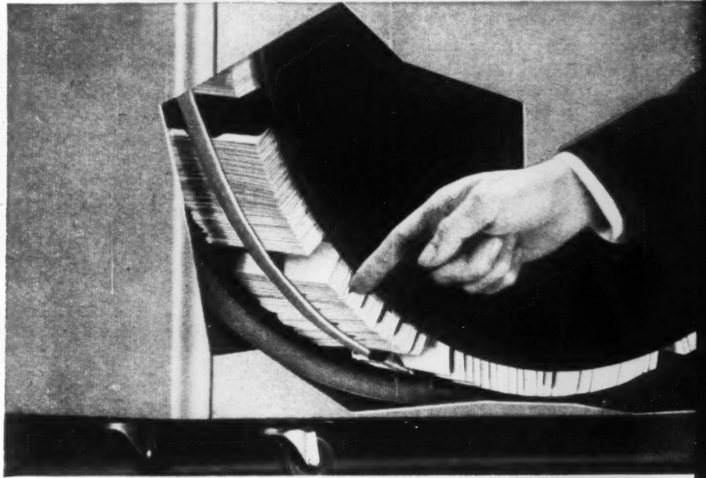
1. **USES PRESENT CARDS.** With amazing Mosler Revo-File, no costly transposition is needed. You save an average of $200 in change-over costs plus big savings in time, space, money over old-fashioned filing.



2. **REMOVE OR REFILE ONE CARD OR HUNDREDS** instantly. Mosler Revo-File holds cards without mechanical attachment. No wear on card or clerk. Ups efficiency. Gives real finger-tip control.



3. **CARDS CAN'T DROP OUT.** Mosler Revo-File is the only file of its type that doesn't rely on notched cards that wear out in use. The patented, exclusive belt method of holding records in file assures complete protection against card "fall-out" or wear.

PRODUCTION CONT

4. **FILING IS FASTER, REFERENCE IS QUICKER** with Mosler Revo-File as "cards come to clerk" instead of clerk going to cards. Note automatic visual "V" permits easy reference to any card. Revo-File available in manual or electric automatic selector models.

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For big volume filing Mosler Roto-File can accommodate more than 80,000 cards . . . has all the exclusive features of Mosler Revo-File. Several clerks can work at same time.

Another fine product of The MOSLER SAFE Company

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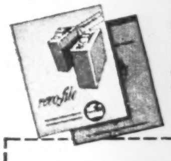

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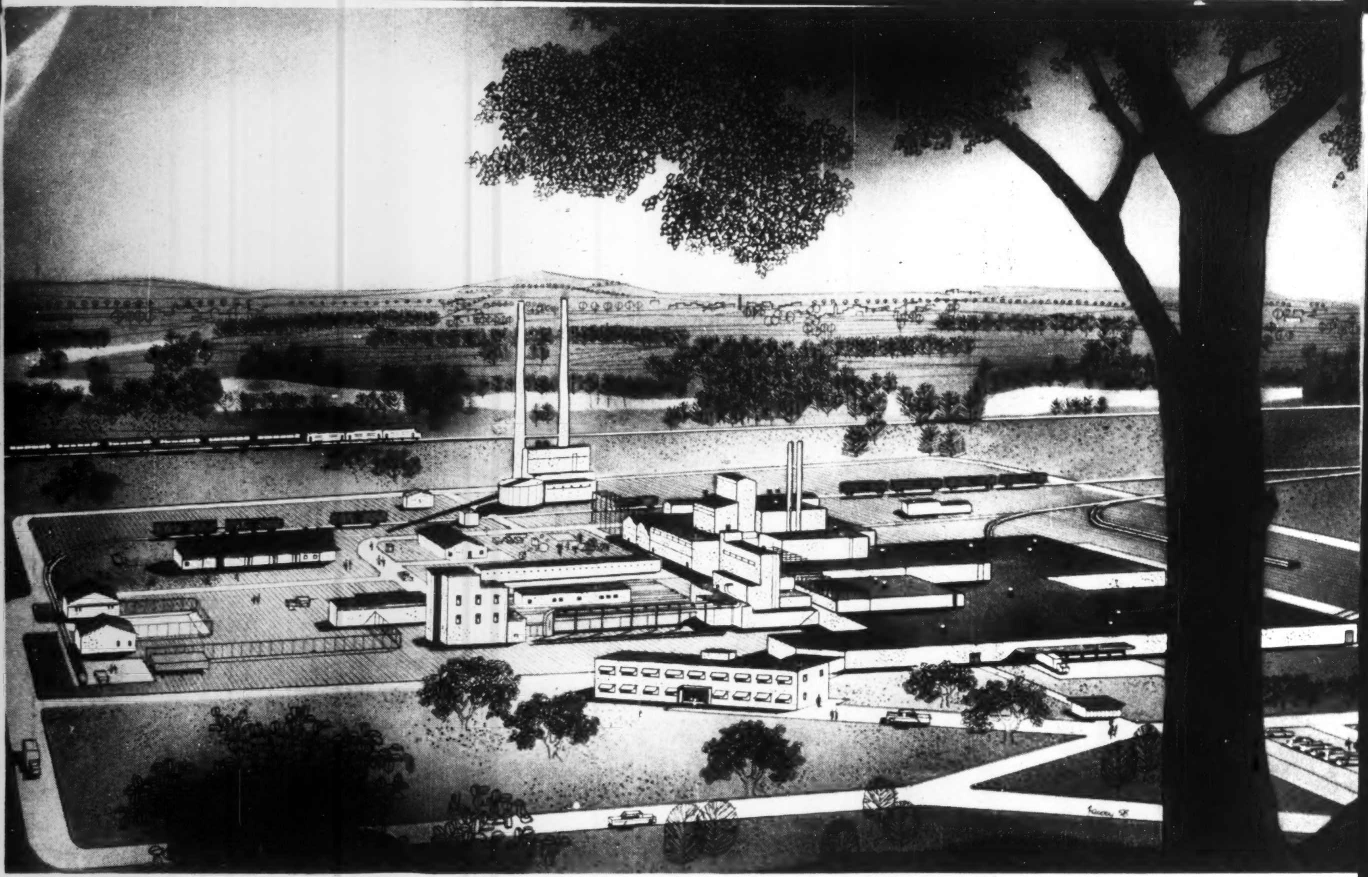


This new Olin, Indiana, cellophane plant covers more than 5 acres under one roof.

How New York Central helped Olin Mathieson develop 655-acre site for new cellophane plant

WHEN A SITE was being considered for a new cellophane plant, New York Central provided factual and complete information on several desirable sites.

A location in Kern, Indiana (later renamed Olin) met the specific requirements for a cellophane plant. New York Central's Plant Site Consultants, working with plant-site engineers and local community leaders, assembled a 655-acre site . . . conducted land evaluation and labor availability analyses . . . designed and built needed spur line track into the "world's most modern cellophane plant."

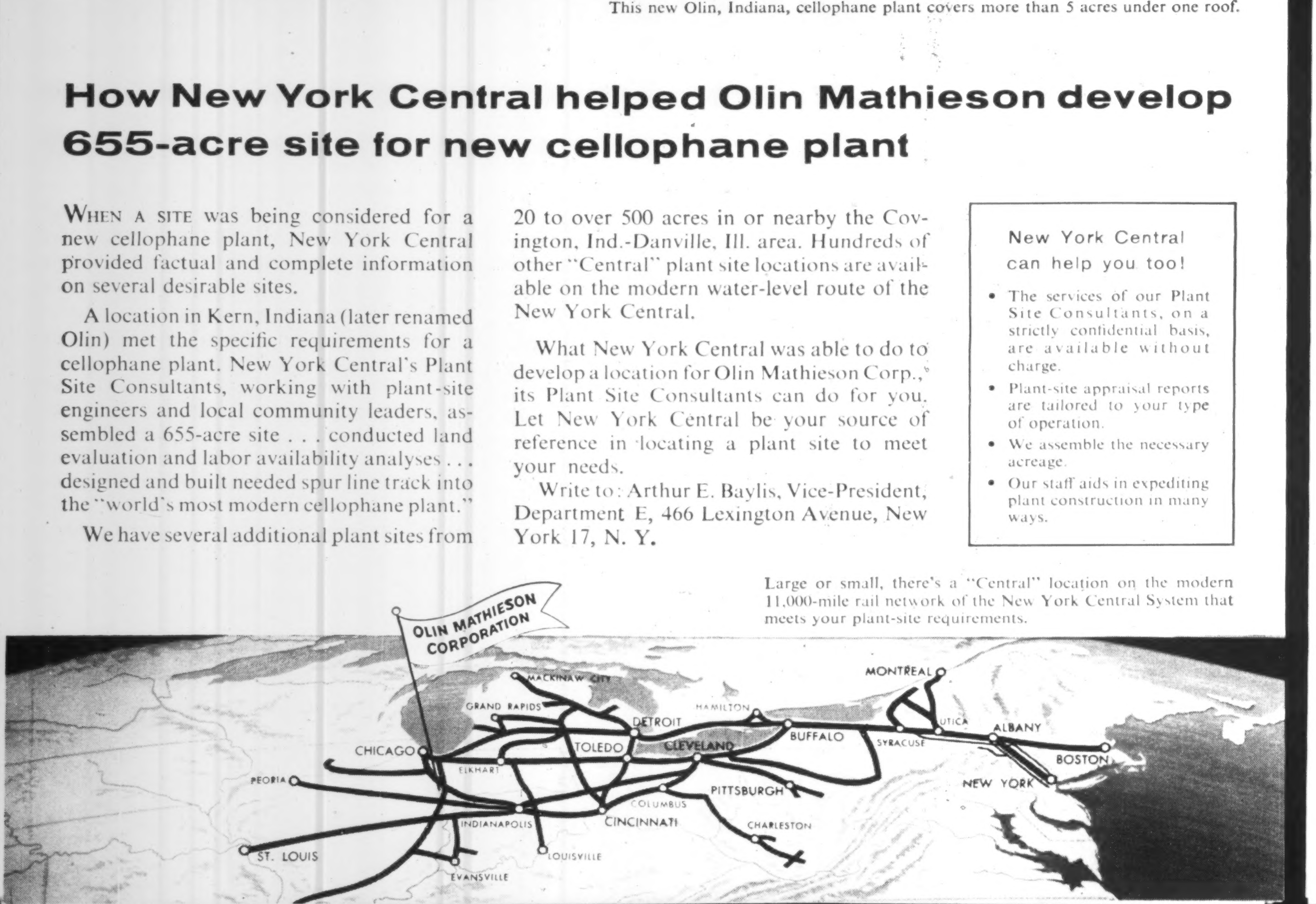
We have several additional plant sites from 20 to over 500 acres in or nearby the Covington, Ind.-Danville, Ill. area. Hundreds of other "Central" plant site locations are available on the modern water-level route of the New York Central.

What New York Central was able to do to develop a location for Olin Mathieson Corp., its Plant Site Consultants can do for you. Let New York Central be your source of reference in locating a plant site to meet your needs.

Write to: Arthur E. Baylis, Vice-President, Department E, 466 Lexington Avenue, New York 17, N. Y.

New York Central can help you too!

- The services of our Plant Site Consultants, on a strictly confidential basis, are available without charge.
- Plant-site appraisal reports are tailored to your type of operation.
- We assemble the necessary acreage.
- Our staff aids in expediting plant construction in many ways.



Large or small, there's a "Central" location on the modern 11,000-mile rail network of the New York Central System that meets your plant-site requirements.

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CHICAGO
TOLEDO
CLEVELAND
BOSTON
ELKHART
PEORIA
PITTSBURGH
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Wonderful work-shrinker!

...reduces day's job to 40 min.

One girl used to spend all day Monday dating, coding and counting the guaranty cards received from new customers during the previous week...With a Tickometer, the same job is done in forty minutes!

- Hand work is costly in the office as well as the factory. On such repetitive, mechanical tasks as counting, marking, stamping, numbering, dating, canceling, coding—the Tickometer is eight times as fast as an experienced girl!
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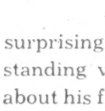

Ask your secretary to send for our new full-color chair catalog. Address Dept. D, Steelcase Inc., Grand Rapids, Michigan.

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THE PRESIDENTS' PANEL

REPORT NO. 6

Industry's Leaders Size Up the PROFIT SQUEEZE

- *Fewer companies anticipate better profit margins this year*
- *But a majority expects a business upturn in 1958's fourth quarter*

KENNETH HENRY, *Executive Methods Editor*

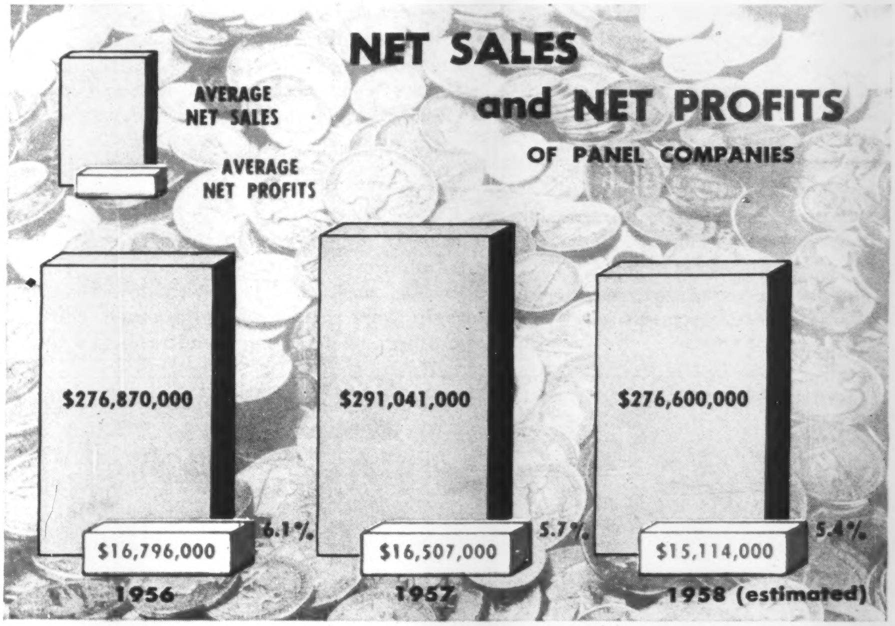
FOR MANY COMPANIES with a record of rising net sales in recent years, profits have been steadily slipping into a kind of economic skid row. And in a significant number of companies, profits are becoming the No. 1 dollar rehabilitation problem. Despite some significant exceptions, a majority of the more than 100 major industrial companies on DR&MI's Presidents' Panel (which includes a cross-section of top-ranking U.S. companies) have experienced this familiar sliding profit pattern. And, in general, their problems have been made more acute by the recession.

With a 5 per cent overall increase in net sales in 1957 over 1956, presidents of companies participating in DR&MI's latest Panel survey show an aggregate drop of 1.7 per cent in after-tax net dollar profits. In 1958, among the companies projecting net sales, volume is expected to decline 5 per cent below this year and about equal 1956 levels—but with a further dip of 8.4 per cent in dollar profits. With roughly the same net sales volume in 1958 as in 1956, net profits are expected to be 10 per cent lower.

For the average Panel company, net profit as a percentage of net sales has slipped from 6.1 per cent in 1956 to 5.7 per cent in 1957—with a further drop to 5.4 per cent expected by the end of fiscal 1958.

Shrinking profits are pointed up by an analysis of the size of net profits in the three-year period. During this time, about six out of ten companies have earned (or plan to earn) net profits within a range of 2.5 per cent to 7.4 per cent of net sales. But although 22 per cent of the Panel companies reporting recorded net profits of 7.5 per cent or more in 1956, the number of companies in this top profit bracket declined to 20 per cent in 1957. And only 14 per cent of the Panel companies expect to do as well in 1958.

On the other hand, 15 per cent of the companies recorded profits below 2.4 per cent in 1956; 20 per cent fell in the same bracket in 1957; and



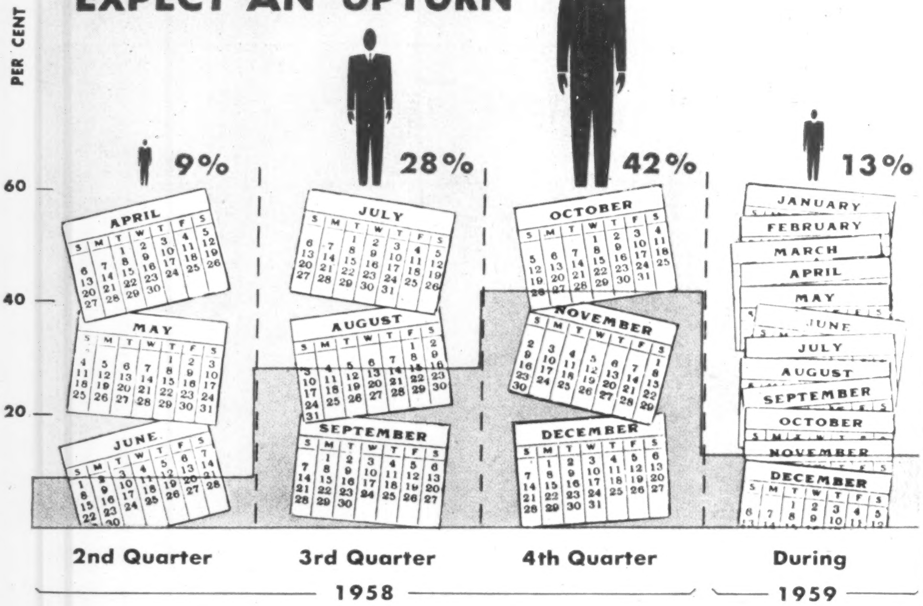
24 per cent of those reporting expect to end up in the group this year. The following table pictures this trend.

% of net profits	% of Panel companies 1956	1957	1958
7.5 or over	22	20	14
2.5 to 7.4	63	60	62
0.0 to 2.4	15	20	24

This analysis excludes several companies reporting losses in 1956 or 1957; 1958 figures represent expectations.

In 1957, exactly two-thirds of the Panel chalked up a smaller percentage of net profits than they did in 1956. Not surprisingly, the presidents in this group blame the profit pinch on the familiar cost-price-productivity squeeze. Despite the rising costs of material and labor, these companies report that growing competition forces them to hold the price line at present levels, with the result that profits suffer.

WHEN PRESIDENTS EXPECT AN UPTURN



[*Note:* Eight per cent of the presidents decline to make specific predictions or "don't know."]

Rising labor costs are an old chapter in the squeeze story. Nation-wide, industry paid $69 billion to its workers ten years ago. Last year, payrolls had more than tripled, and stood above $215 billion. Labor costs, for many companies, are intensified when they become part of the three-way squeeze reported by many Panel companies: "Lower sales, lower ratio of output to capacity, and higher labor and materials costs."

A number of presidents—nearly two out of ten—attribute the profit pinch to overcapacity or past capital expenditures. In the process of gearing operations to a longer-range future, in which confidence is still unshaken, these companies have invested substantial sums in plant and equipment.

And new products, often considered a cure-all for the profit pinch, also take their toll, especially during the changeover period. Some companies blame the recent slip in profits on the "costs of introducing new products, including engineering, preproduction, and marketing training." Increasing competition, declining sales, changes in accounting practice (from average-cost to LIFO), strikes, inventory adjustments, stretch-outs in defense contracts, and rising research and development costs come in for scattered mention. A few men attribute reduced profits to the recession, "which has halted the growth for which we were manned."

Among the 24 per cent of the Panel with improved profit ratios in 1957 over 1956, a better profit showing is attributed primarily to new products, a better product mix (with low-margin items pruned out), increased operating efficiency, reorganization, and a more effective control of costs.

Pinpointing the Upturn

When will the U.S. economy take the upward turn that signals an end to the current recession? There is no more urgent question today in the minds of business men, Government officials, and average citizens. Nobody, of course, knows for sure, and sharp disagreement has developed among informed economists—even, it seems, among the President's economic advisers. Company presidents may not be better informed than anybody else, but since they live daily with the profit-and-loss facts of business life, their opinions count.

Eight out of ten presidents on the Panel expect business to get better in 1958, and one out of ten predicts an upturn some time in 1959. Confidence ranges from one president's opinion

AMONG THE DR&MI PRESIDENTS' PANEL MEMBERS ARE THE PRESIDENTS WHOSE PICTURES APPEAR ON THESE PAGES.

WALLACE L. PIERCE
S. S. Pierce Co.

P. O. PETERSON
Mack Trucks, Inc.

O. A. BEECH
Beech Aircraft Corporation

G. W. BENGERT
The Norwich Pharmacal Co.

P. LeBOUTILLIER
The Ottawa River Paper Co.

A. C. GILBERT, JR.
A. C. Gilbert Co.

that business is already in an upswing, "but [it] won't show up statistically for three or four months," to that of an out-and-out pessimist who foresees no change "for several years." Of those expecting an upturn in the U.S. economy this year, most of the men pinpoint the fourth quarter as the turning point. A significant number name the specific months of September and October.

Spurs to Profit

According to the panelists, gross profits over the next few years will be improved primarily by three factors: new products (cited by 65 per cent), expanding U.S. population (30 per cent), and increasing export markets (14 per cent). Another 13 per cent of the panelists expect all these sales factors to contribute to a stronger gross profit showing. But only 7 per cent look for gains due to increased selling prices. Since many men name two or more factors, the figures add up to more than 100 per cent.

The importance of new products to profit improvement is highlighted by one Panel president's report that "25 per cent of 1957 sales are of products introduced in 1957." A few panelists expect gross profits in the coming years to be shored up by such varied factors as increased advertising, new uses for present products, defense spending, more highway construction, a growing housing market, and acquisitions. But a significant number of men stress the profit promise of improved distribution, better marketing management and techniques, and —a frequent comment—"concentrated sales effort."

With labor pushing costs up and competition putting new strains on selling prices and sales volume, management is looking for new ways to relieve the squeeze on gross profits. Over the next few years, panelists expect these expense factors to improve their profit picture: more efficient processes

continued on page 82

WHAT SHOULD WASHINGTON DO ABOUT THE RECESSION?

Here is what the members of DR&MI's Presidents' panel think the Administration should do. Though panelists' views vary considerably, a significant 43 per cent favor a tax cut, and 8 per cent think the Government should cut its own expenses as well as taxes.

Cut taxes now or if the recession deepens . . . . say 35%

"This is an ideal time to initiate long-needed tax reforms to stimulate capital investment. These should include eliminating the double taxation of dividends and allowing depreciation deduction which will enable plant and equipment replacements at inflated price levels."

"Across-the-board tax cut of 5 per cent."

Cut costs of government . . . say 5%

"Conduct its own operations more economically and reduce over-all budget."

Cut taxes and expenses . . . say 8%

"Reduce wasteful and unnecessary spending and, to the extent of such reductions, lower taxes, but not to the point of incurring a deficit."

"We need an individual tax cut and cut in foreign spending to restore confidence. We don't lack money—only leadership. Ike should resign."

Lower interest rates, ease credit, or loosen fiscal controls . . . . . say 7%

Step up defense spending . . say 5%

Increase public works spending . . . . say 9%

Use a combination of measures . . . . say 13%

"Control monopoly power of unions. Reduce taxes per Sadlak-Herlong bill. Increase sound public works."

"Sharpen its forecasting ability and map out orderly, efficient, sensible, and nonpartisan steps for lower bracket tax relief (such as increased exemption allowance), improvement of social security benefits, moderate corporate tax relief, and promulgation of needed public works (such as highways, schools, and universities)."

"Accelerate Government construction programs; reduce income taxes; but do *not* raise tariff barriers."

"A broad tax cut would be the best and least inflationary method of stimulating business activity. After tax cuts, it is possible that the Government will then learn to tug in its belt a bit to adjust to the lowered revenues. I think it is also in order to carry on *needed* Government public works in depressed times, but it is ridiculous to make work. Another factor that could well be looked into is an examination of the tariff structure to see if quotas or increased protection in some areas would not stimulate business activity in this country."

Leave the economy alone . . . say 9%

"'Laissez-nous faire.' I have great faith in today's business managers."

"Keep out of it."

"Administration should go very slowly in trying to 'prime the pump' at this time. If we are to expect long-term growth without excessive inflation, it is necessary that our economy be allowed to try to make a reasonable adjustment on its own. Would favor the Government's reducing the cost of money and increasing the availability of money. Would not favor deficit spending."

Miscellaneous 4%

"Prompt release of contracts for needed materials and services, with emphasis on those that will increase employment earliest."

"Any action necessary to restore confidence to the public and to encourage investment in business."

"Unemployment or inflation—take your choice."

No comment 5%

J. A. KELLER
Mergenthaler Linotype Co.

W. J. BERGMAN
Lily-Tulip Cup Corporation

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W. M. GOSS
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Minneapolis-Moline Co.

BETTER HIGHWAYS BOOM TOMORROW'S BUSINESS

A cloverleaf intersection on the Dallas Expressway gives the city easy egress-ingress.

RAYY MITTEN

It's in the works right now, and its effects may give your sales curve a boost you hadn't counted on. Here's the probable timetable of the Federal multi-billion-dollar highway program—and what it will mean to industries across the nation.

"GIVE us two more years."

By then the impact on the economy of the multi-billion-dollar Federal-aid road-building program will be obvious, says Bertram D. Tallamy, administrator of the Federal Bureau of Public Roads.

Modern highways will vigorously stimulate the areas they serve. Already, dynamic projects like the New York Thruway, Route 128 in the Boston metropolitan area—sometimes called "the Golden Avenue"—and the Gulf Freeway at Houston are having a tremendous economic impact. For example, about $500 million worth of industrial development is already under way in areas served by the Thruway. And it is probably no exaggeration to say that, on a nation-wide scale, the Federal-Aid Highway Act of 1956 will have almost the effect of another industrial revolution on the economy.

At present, the over-all program carries a $100 billion price tag. Because of cost uncertainties, no one can be sure now of the final figure. But one thing is certain: the highway dollar is bound to generate other business. In testifying before a House subcommittee, Maj. Gen. Louis W. Prentiss, executive vice president of the American Road Builders Association, cited studies showing that every highway dollar spent in a project area produces $4 to $5 of business.

Other studies, made a few years back, show that each dollar spent on road building generates $3.15 worth of secondary business for those outside the highway construction industry.

But the dollar isn't the only yardstick for measuring the program's potential effects. It can save motorists' lives, set—or reset—the pattern of industrial expansion for years to come, alter the face of whole metropolitan areas, and save money all along the line for business and consumers.

The 1956 Act initiated the most sweeping highway program in world history. In comparison, ancient Rome's famed Appian Way would seem only a side street.

The Act authorized a 41,000-mile interstate system to connect 90 per cent of U.S. cities with populations of 50,000 or more, all to be accomplished over a period of sixteen years. The Federal Government pays 90 per cent of the cost. Also, mileage for the existing program (known as the ABC System) for primary, secondary, and urban roads was increased. ABC Sys-

When the New York State Thruway came to the Mohawk Valley, industry began to expand. The Beechnut Packing Company (above, left) added 80,000 square feet to its plant.

tem costs are shared equally with the states.

As an anti-recession measure, Congress has just passed a bill authorizing additional Federal money to speed up work on the interstate system in fiscal 1959, 1960, and 1961.

All Federal funds come from a new Treasury trust fund, except for the extra money authorized this year for the interstate system, which will be taken from the Treasury's general fund. Certain Federal excise revenues that are earmarked for highway use go into the trust fund. The ABC System gets first call on trust fund money. Altogether, 741,823 road-miles are now eligible for Federal aid, and that figure is likely to go up.

There is pressure in and on Congress to expand the ABC System, a move that would be particularly important to Congressmen from predominantly rural areas, because the ABC System includes farm-to-market roads. Such a move is now under consideration.

More Money Needed

But completion of the brightly spotlighted interstate program will be stretched out beyond the specified sixteen years unless Congress provides still more money. Actual costs are running sharply above original estimates. The program could take eighteen to twenty years to complete.

But Congress may prevent a stretchout. Sen. Albert Gore (D., Tenn.), chairman of the Senate's highway subcommittee, has already indicated as much in a speech before the recent convention of the American Road Builders Association.

Costs—and these plague the states, too—are 37 per cent above the 1954 estimates on which the 1956 Act was based. The interstate system alone was figured to cost $27 billion. Now the estimate runs from $37 billion to $40 billion. In 1956 Congress authorized almost $25 billion, with the balance (10 per cent) to be paid by the states. With the additional interstate funds voted this year, Federal authorizations to the states will continue to rise until fiscal 1962.

The chief reasons for the price-tag jump are:

- A 12 per cent increase in highway construction costs.
- The original traffic forecasts for 1975 were 15 per cent too low. (The present outlook is for 100 million registered vehicles by 1975—more than a 50 per cent increase over this year's 67 million.) As a result, more traffic lanes and other facilities will be needed than were originally planned.
- Congress wrote some unanticipated specifications into the law. They will increase the total work required by 15 per cent.

Despite cost troubles, authorizations and trust-fund income were about balanced for the first eighteen months of the program, and no difficulty is foreseen for the near future. As of last December 31, interstate obligations were $118 million ahead of schedule, and ABC System obligations were equal to it. Although there are complaints from some industrial sources, both the interstate and ABC System programs are on schedule.

Some of the industry complaints may be the result of the expectation that spending would start as soon as the bill was signed. Actually, in the initial period of the interstate program, most of the time and money was spent on planning. Road builders say there is an average spread of 21 months between the start of planning and the beginning of construction on a project. The interstate program was 21 months old in March.

Although the program's timetable is subject to change at this point, its potential impact is certain. It should provide a solid economic prop this year. The forecast is for total highway spending of $5.5 billion in 1958—$800 million more than last year. Those who build the roads will spend an estimated $2 billion for materials

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Part of the new interstate system, the twenty-mile Schuylkill Expressway feeds traffic from the Pennsylvania Turnpike at Valley Forge into the downtown section of Philadelphia.

FUTURE EXECUTIVES
HANDLE WITH CARE

WILLIAM B. GIVEN, JR.
Chairman of the Board, American Brake Shoe Company

No company asset is more precious to a company than a healthy stock of management timber. Yet waste is shockingly prevalent in this area today. A distinguished industrialist tells why—and what we can do about it.

EACH JUNE, U.S. companies both large and small bid against each other for the cream of the crop of college graduates. (And despite some recession drop-outs and cutbacks, recruiting will still be heavy this year.) Once the auction is over, some recruits move into elaborate management development programs. Others, including a good many who went out and found jobs for themselves instead of waiting to be recruited, start out in "beginners'" jobs. In either case, the objective is the same. The recruit intends to get started up the management ladder, and the company hopes to add to its vital future stock of executive personnel. The long-range opportunities for potential executives seem unprecedented today. Never in history has the need for skilled business and industrial managers been so pressing. Never has the door to advancement stood so wide open.

Many trainees succeed. Many recruited only a few years ago already hold important jobs. Yet, too often, we find a disconcerting gap between promise and performance.

"No Place to Go"

One clue to the reason for this gap is discernible in the increasing number of job applications we receive at American Brake Shoe (and this is also true of other companies) from men in their late twenties and even mid-thirties—the graduates of six to twelve years ago. I talked recently with one such applicant. He has a high-sounding title in a large company. Yet he wants to move out, even at a financial sacrifice.

"I've reached a dead end," he told me. "I've got to go some place where there's a chance to move ahead." If there was any chance whatever of advancement in his present company, he certainly seemed unaware of it.

This situation has become so common that some smaller firms make a practice of recruiting not among college seniors, but among disenchanted management trainees.

What goes wrong? Why do years of apprenticeship and training so often end in discouragement?

Some recruits, of course, just don't have what it takes to make the grade. But this is not true of the majority. These young men are chosen for their character and intelligence. Much time and money are invested in their training. They are badly needed. More of them ought to succeed.

Why does a recruit lose faith in

himself or in his company? Why do company executives become dissatisfied with a recruit? We at Brake Shoe have come to feel that the basic problem is unrealistic expectations on both sides. We see a gap between what the recruit hopes to get from and give to the company, and what the company hopes to get from and give to him.

My purpose in writing this article is to help bridge the gap and promote better recruitment and better counseling. I want to persuade some, a few at least, in management to take a new look at the handling of their juniors.

What Does the Trainee Expect?

To the college senior, getting a job means the start of adult responsibility. He's been sitting in classrooms of one sort or another for sixteen years. Now he's on his own, and often he's eager for a chance to prove himself by concrete accomplishment.

The college senior is sold—perhaps oversold—on the prospect of a glamour job, quick success, and a high salary right away. If he is married, he sells his wife on this prospect too. If he hits "the right company," his future seems assured. He can't wait to get his feet on the ladder, and he expects to spend little time on the bottom rungs.

But the recruit's first supervisor may see matters differently. In fact, a man's first boss may be quite a shock to him.

One of our present district sales managers almost quit during his first year. A former fighter pilot, he felt he was being treated like a child. His immediate boss met every suggestion with "Don't waste my time," or "What makes you think you can do it better?" Happily, this young man was urged by friends in the company to ride out the year. Also, he was a born fighter who saw his supervisor as a challenge. Many other good men would have given up.

Fortunately, hidebound supervisors are becoming scarcer, but there are reasons—though not excuses—for their behavior.

In the first place, the "hard-boiled" supervisor sees the recruit as a unit of manpower rather than as a trainee. He has work to get out, and he wants the recruit to help get it out without troublesome questions and comments. Second, his concepts of supervision may have been shaped during the depression, when jobs were scarce and executive development was unheard of.

"I jumped when my boss cracked the whip. Nobody bothered to 'train' me," one supervisor complained. "I had to fight to get as far as I have. Now along comes a college boy with a lot of book knowledge, expecting success on a silver platter. He knows nothing about our operations. I learned the hard way, but I'm supposed to pass it all on in six easy lessons so he can move ahead and be my boss."

Interest Pays Off

This same unwillingness to teach can be found, unfortunately, in the higher echelons of management, too. And nothing is more discouraging to the recruit. A young man with potential can take a tough boss who demands his best, but it's hard to take a boss who grudges instruction and withholds appreciation. The "hands off" attitude is the worst. Too many managers are afraid to show interest in their subordinates.

Management's failure to provide effective training is one of the reasons recruits get restless. Another is the habit of "stockpiling" executive timber far in excess of any foreseeable need. This results in a situation where men in the junior ranks have about as much prospect of getting a top job as they have of winning the Irish Sweepstakes.

"I'm just one of acres of engineers," one job applicant said. "They assign us to drafting, keeping cost records—anything to keep us busy till the next big contract comes along. If that doesn't happen soon, out we go!"

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A SLOWDOWN IN RECRUITING? *Here's what current surveys show . . .*

How is the recession affecting industry's recruiting programs and future hiring plans? Despite an expected slackening-off in college recruiting this Spring, a survey of 223 business and industrial concerns indicates no expectation of a sharp cutback over the next two or three years. In fact, only thirteen of the 223 companies estimate that their needs will decrease and only two that starting salaries will decline. This report is part of an annual survey made each Fall by Dr. Frank S. Endicott, director of placement at Northwestern University, on trends in employment of graduates by business and industry.

Prospects for this June are less rosy. Most forecasters see an over-all decline in the number of job openings. Predictions vary only in degree. For instance, the companies surveyed by Dr. Endicott expect to hire 8 per cent fewer June graduates than they did last year. The nontechnically trained men will bear the brunt of the cutback, with 14 per cent fewer openings. But the demand for engineers and scientists is expected to hold steady.

According to later surveys, business is now expecting to make still heavier recruiting cutbacks in June—as much as 30 per cent for nontechnical graduates and 25 per cent for the technically trained. Big companies seem to be cutting back the hardest, some by as much as 50 to 60 per cent. But most smaller enterprises plan to hire about the same number of men as last year, and in some instances even more.

Starting salaries are showing no tendency to drop along with the falloff in recruiting. In fact, industry is expecting to pay the young men who are hired in June as much or more than they paid last year's recruits. Dr. Endicott's survey shows an expected 4.6 per cent increase over 1957. The main reasons given for the rise are the continued competition for technically trained men, the shortage of good men, and the upward trend of negotiated wage rates. Dr. Endicott also points out that in past years company recruiters have always offered higher starting salaries when hiring actually got under way in June than they anticipated in the Fall.

As the shopping centers take hold as a major force on the U.S. retailing scene, changes unguessed at a few years ago have been shifting marketing patterns from the manufacturer level on down.

AMERICA'S SHOPPING-CENTER REVOLUTION

WEATHER NO PROBLEM: Overhangs protect shoppers in new Bergen Mall, Paramus, N.J.

ART ZUCKERMAN

FOR J. C. Nichols, 1927 was a very fine year indeed. It was the year he saw the climax of a story begun twenty years earlier when he had launched an integrated development of fine houses, christened the Country Club District, on a 10-acre tract south of Kansas City. During those twenty years the development had mushroomed into a major suburb, a suburb in which each house was hand-tailored to complement every other structure in the area.

But it was in 1927 that Nichols saw the real flowering of his efforts in his Country Club Plaza, a planned retail center conceived to serve the residents of the Country Club district. Pride engulfed him as he surveyed the park-like rest areas, the tree-lined sidewalks, and, above all, the novel off-street parking facilities.

The Kansas City developer was fully aware that in the Plaza he had created something unusual. Of course, he didn't know that he had set the pattern for a retail revolution. It took two decades for the revolution to shift into high gear.

For, though quite different physically, the Country Club Plaza was in many ways the prototype of today's suburban phenomenon—the planned shopping center.

About 2,500 of these centers, in many shapes and sizes, are doing business today. It is estimated that they gross around $35 billion annually. Some experts expect as many as 1,400 additional centers to appear within the next two years, bringing total shopping center business up to an annual $71 billion gross. As the population grows, economists foresee still more shopping centers sprouting over the countryside.

In a relatively short period of time, the centers have brought many changes to the business scene. Most obviously, they have forced a mass facelifting of old, established stores. The eye-appeal of the new centers has made the inadequacy of old store fronts, poor display facilities, and bad lighting abundantly clear.

To some degree, the shopping center may be a threat to the economic future of that national stalwart, the independent retailer.

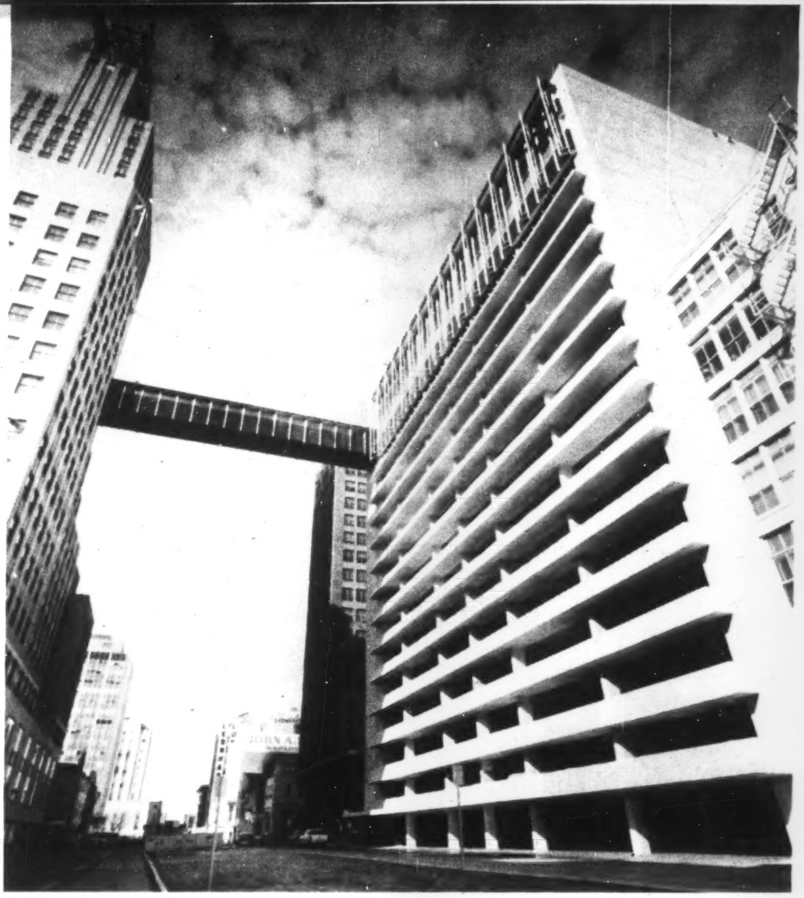
Because the shopping center is a Johnny-come-lately, dependent on immediate-need, impulse buying, it has become a stronghold of the brand name. As a result, it has provided manufacturers with a specific market for their branded, higher-quality merchandise.

Although developments like the Country Club Plaza began cropping up as early as the 1920's, the modern shopping center is really a postwar product. In the first peacetime years millions of ex-GI's, eager to make up for lost time, got married and started rearing children. An explosive increase in the number of U.S. households was a result.

Prompted by dreams of a great new fresh-air utopia—and by the sheer necessity of finding space to live—the new families settled in suburbs that builders rushed to prepare for them. These families needed a lot of things, and the shopping centers sprang up to meet their needs. So, in a way, you might say that GI mortgages were responsible for the modern shopping center's existence.

The centers have about as many physical variations as the people they serve. Some cover less than 40,000 square feet; some cover more than 1 million square feet. Some serve only a small neighborhood; others supply a vast region. Some have but ten stores, and some boast 80.

But they all have one thing in common: planning. Virtually all are balanced collections of stores designed to meet the needs of a specific market area. And, of course, they have lots and lots of parking space. Every facet



COUNTER-STRATEGY: This is one of six multi-story parking units erected in Oklahoma City to encourage downtown shopping. A bridge links the Liberty National Bank building (left) with new sixteen-story unit. Wide-angle camera produces toppling effect.

is planned. An economist, an architect, and a traffic engineer go into a huddle. Together, they determine the market potential, design an appropriate plant, figure out the traffic flow from all points, spot access roads, and work out the internal parking and traffic pattern.

Centers today are obviously big business. For instance, Northland, on the fringe of Detroit, has hit at least an $85 million gross annual volume. In 1954, only two years after it opened, Chicago's Evergreen Plaza achieved a $35 million to $40 million volume. Also in 1954, San Francisco's Stonestown garnered a $38 million gross.

Inevitably, the centers have formed their own trade association, the International Council of Shopping Centers.

Chain store organizations recognize the shopping center as their ticket to profitable expansion. The centers

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TELLING THEM APART

Shopping centers don't always fit neatly into clean-cut categories. They show individual variations and departures from the average. Nevertheless, people concerned with their development and operation generally agree that three major types are identifiable by certain broad characteristics they more or less share:

CONVENIENCE OR NEIGHBORHOOD CENTER:

Serves 5,000 to 10,000 families

Has 10 to 20 stores, 30,000 to 70,000 square feet of sales space

Parks an average of 360 automobiles

Has a supermarket as top tenant

Is most often laid out in a strip pattern

COMMUNITY OR DISTRICT CENTER:

Serves 20,000 to 40,000 families

Has 20 to 40 stores and 75,000 to 200,000 square feet of sales space

Parks an average of 1,300 automobiles

Has a junior department store as top tenant

Is most often laid out in an L pattern

REGIONAL CENTER:

Serves 100,000 to 500,000 people

Has about 40 to 80 stores, 400,000 to 1 million square feet of sales space

Parks an average of 4,000 to 5,000 automobiles

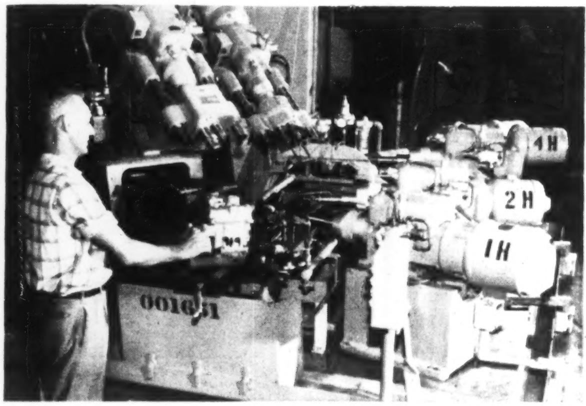
Has a major department store branch as top tenant

Is most often laid out around a central mall, though many have a store cluster around the top tenant

NEW LOOK: Community shopping centers are often L-shaped. But a pinwheel pattern with an L on both sides is rare. The Pala Center in San Jose, Calif., shown above, is a recent example of this design. Opened in 1954, the center was designed by Victor Gruen.

RECESSION SPURS PRODUCTION COST CUTTING

Less overtime, fewer late shifts... improved tooling and controls...



MELVIN MANDELL, *Industrial Editor*

COMPANY PRESIDENTS are always open to attack from many directions. But when the president of a medium-size concern that manufactures electrical goods was suddenly ousted earlier this year in favor of his controller, a cost-cutting expert, the signal was clear: Cut costs or face the consequences.

Bolstering sales is the big worry during a recession, of course (DR&MI, March 1958, page 37). But while you're cracking the whip over your sales department, a few lashes at production won't hurt. When a company is operating at full production, extensive improvements and repairs, even to cut costs, are often difficult to initiate except at the price of downtime. But the current recession, with attendant slowdowns in production, represents for many companies an opportunity for instituting certain types of cost-cutting programs that—paradoxically—would be too costly to organize and put into effect during boom times. Then there's always the fat, accumulated in good times, that needs the sharp edge of a recession to trim it down.

To find out what industry is doing, as a result of the recession, to cut production costs, DR&MI has conducted a nation-wide survey of large and small manufacturers, through visits to several plants and by questionnaire. The survey shows the attack moving along two main lines:

- Immediately effective measures, like the elimination of overtime—an almost unanimous move.
- Long-term measures, like greasing creaky, overworked joints and the initiation of cost-cutting and efficiency-promoting programs that cannot be easily introduced when a plant is running full blast.

No Fixed Pattern

Of course, not all cost-cutting measures fall into these two categories. As policy decisions, they are governed by a complex of management concerns, such as cutting inventory or strengthening sales. For example, many manufacturers, like Pleasantville (N.Y.) Instrument Corp., revised "make-or-buy" policies not only to save money but to avoid laying off workers they had trained at considerable expense.

With the twofold objective of cutting costs and meeting foreign competition, other companies go off in exactly the opposite direction by contracting out parts they formerly made. Sometimes the parts are imported from Germany or Japan, where they can be made for less than similar parts in the United States. Of course, this does nothing to increase the amount of purchasing power here in the United States.

The Pause That Refreshes

With every machine in a factory running, it's often difficult to shut down to make needed repairs and realignments: every production unit lost means fewer sales. But when the plant is on a three- or four-day week, there's plenty of time to get things in top condition for the next production push. Most plants are catching up on needed maintenance, but a few, like Smooth-On Manufacturing Company in Jersey City, N.J., are actually shutting down partially or completely for major overhaul and repair. Despite a need to conserve capital as much as possible, other companies, such as the Garrett Corp., Los Angeles, are continuing a policy of replacing existing machinery with heavier-duty types. A big Midwest air-conditioning fabricator is thinking of introducing a completely new materials-handling system.

Although the electronic controls associated with big milling machines are as costly as the machines themselves, many efficiency-promoting

more pressure on suppliers......

redesign to cut production costs...

electronic controls are more modestly priced, and some companies, including a large Eastern fasteners manufacturer, are adopting them.

A handful of companies surveyed, including Weber Engineering, Cincinnati, have also called in engineering consultants to help them cut costs. Weber, which went through a private depression in 1956 and 1957, has also introduced a new incentive system. Lau Blower Company, Dayton, Ohio, is introducing a new production-control system.

American Machine & Foundry, Inc., is consolidating some of its smaller plants into larger, more efficient units.

Fast-Acting Cost Cutting

Some companies were hit hard early in the recession by, for instance, Armed Forces' contract cancellations and "stretch-outs." For them, long-term cost cutting was not the answer. They had to act fast to introduce immediate savings. A controls manufacturer in Pennsylvania, for example, asked all executives to take a "voluntary" 20 per cent cut in pay. Oliver Corp. simply shut down one of its smaller, less efficient farm implements plants in South Bend, Ind., a move that, in effect, raised over-all company efficiency and cut freight costs. A giant metals producer is also shutting down some of its less efficient plants.

Purchasing agents are putting the screws on parts suppliers for bigger discounts, lower prices, or faster delivery (to hold parts inventory down). A Midwest camera manufacturer, for instance, not long ago forced one of his suppliers to cut the cost of a sub-assembly by nearly 10 per cent. This pressure on suppliers is applied not only to cut costs but to meet similar pressure from customers.

Selling to Suppliers

That hush-hush word "reciprocity" crops up more and more. Reciprocity purchasing has long been practiced in the machine-tool industry, but other hard-goods manufacturers are now taking steps designed to encourage buying of their products by suppliers. This doesn't cut production costs, but it helps sales. Some companies have even bought up suppliers hard pressed by the recession, usually by stock trades.

A majority of the manufacturers surveyed are tightening production controls to cut down on spoilage and rejects—one of the quickest ways to reduce costs. Improved inspection also helps, but doesn't save as much as making the part right in the first place. Because a recession is a spur to better workmanship, management will experience less resistance to tighter controls than it would in normal times.

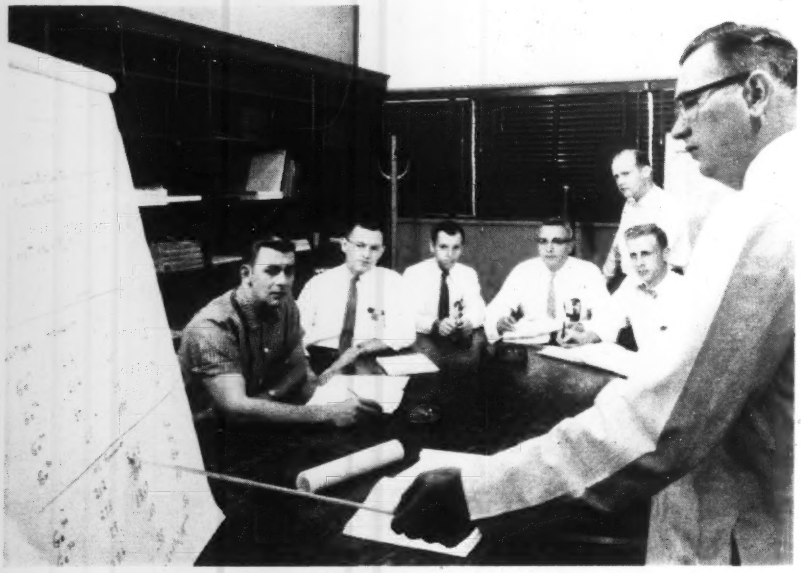
When layoffs are necessary, many companies are getting rid of deadwood, if seniority rules permit selective layoffs. And one company president frankly admits that he is letting his workers think more layoffs are in store to needle them into doing a better job, even though he doesn't actually foresee more layoffs.

Reacting to the recession, many concerns are simply intensifying or "speeding up" their regular and conventional cost-cutting techniques, like improving tooling and eliminating unnecessarily high tolerances. Substitution of epoxy for steel in short-run dies is one example that is frequently mentioned. Another manufacturer is giving bigger suggestion awards to workers who come up with good ideas for cutting production costs.

Designing for Production

Since engineers frequently design with ease of operation in mind rather than ease of production, it's no surprise to find that many products can be redesigned to eliminate production steps—without sacrificing performance. Substituting printed circuits for wiring in electronic gear is one popular way of cutting production costs. Some metal-working outfits are turning to new high-strength aluminum casting alloys to cut down on machining time.

Many companies, such as Daven Products, Livingston, N.J., and Townsend Company, New Brighton, Pa., are also keeping their engineers hard at work expanding the line, either with new low-cost items or with high-end goods. Result: market



Many companies are taking advantage of the current business lull to send unoccupied executives and key production men to company or outside schools where they can learn new production skills or brush up old ones. Here, a course in radioisotopes is in progress.

penetration is increased and the slack in unused production capacity is taken up.

No Frills, No Extras

Daystrom Transicoil, Worcester, Pa., has decided to standardize what was formerly a partly standardized line of precision motors, generators, and gear trains. By keeping the plant working steadily producing off-the-shelf items, production costs are down, making possible a cut in prices, and customers can get 24-hour delivery.

Instead of offering only components and design services on pneumatic conveyer systems, U.S. Hoffman Machinery, Syracuse, N.Y., is taking complete responsibility for the system, according to Revis Stevenson, executive vice president for industrial operations. This not only provides more work for the plant, but results in more efficient use of the company's sales and engineering forces.

When a company's sales threaten to bump against the break-even point (or even slide past it), cost cutting takes on an entirely different aspect. In the words of A. W. Hartogensis, chief methods consultant for Ebasco Services, Inc., New York, "In good times, cost cutting usually means fatter profits. In bad times, it may be the only way to provide the vital margin for survival."

Holding on to a trained workforce is as important to certain manufacturers as cost cutting. It keeps future training costs down. As one company executive puts it, "Once you let the good men go, they never come back." Some concerns, like Penn-Union Electric Corp., Erie, Pa., are retaining skilled production workers by switching them to maintenance work, such as repainting the plant and machinery. Others, like Heli-Coil Corp., Danbury, Conn., are sending key men to school to brush up old production skills or learn new ones.

Spreading Out the Work

Many companies are increasing work by making parts they formerly bought. Although this often cuts costs, as in the case of companies that are buying up suppliers, it can have the opposite effect. But some manufacturers consider the sacrifice worthwhile if it gives more work to their own people.

Many plants are giving all or part of their workers early vacations rather than lay them off. For example, when St. Joseph (Mo.) Lead Company, was forced to cut production, it offered the union a choice of working a four-day week for fifteen weeks, or taking a three-week fully or partially paid vacation in March. The union chose the latter, which will enable the company to make certain savings. This Summer none of the workers will take vacations, which means that the company won't be obliged to hire costly part-time or temporary workers to maintain production levels or tend smelters.

Resolite Corp., Zelienople, Pa., and Pittsburgh Steel Company also gave workers early vacations.

Keeping key people on retainer is the unusual step taken by Fluor Corp., Los Angeles. While laid-off technicians and supervisors are on 40 to 50 per cent retainer, they can work for other companies, says J. Simon Fluor, president, but they must be ready to come back to Fluor on short notice.

Cautious Spending

The current downturn has markedly affected capital expenditures, too. Building programs are either canceled or stretched out, although many companies are courageously sticking to earlier building plans. Some concerns are buying used or rebuilt machine tools instead of new ones. Many companies, such as Invincible Metal Furniture, Manitowoc, Wis., are considering rebuilding present plants rather than constructing new ones.

Although nobody claims that reduced capital expenditures are any way to pull the U.S. economy out of the doldrums, these companies have their individual and particular problems of staying solvent. Their top men are not at all reluctant to say that it is the Government's job to stimulate capital spending and pump more purchasing power into the economy. But none of the company presidents surveyed has gone as far as the head of a machinery plant who has suggested that the Government should encourage capital spending by lending money to the hard-pressed textile-manufacturing industry.

R&D Not Hit

One very encouraging trend for the economy as a whole is the resistance to all cuts in the research, development, and design departments. By holding its research and development budget to last year's level despite a decline in sales, Union Carbide Corp. has, in effect, raised the percentage of gross sales allocated to research, says Dr. A. B. Kinzel, vice president of research. Practically all

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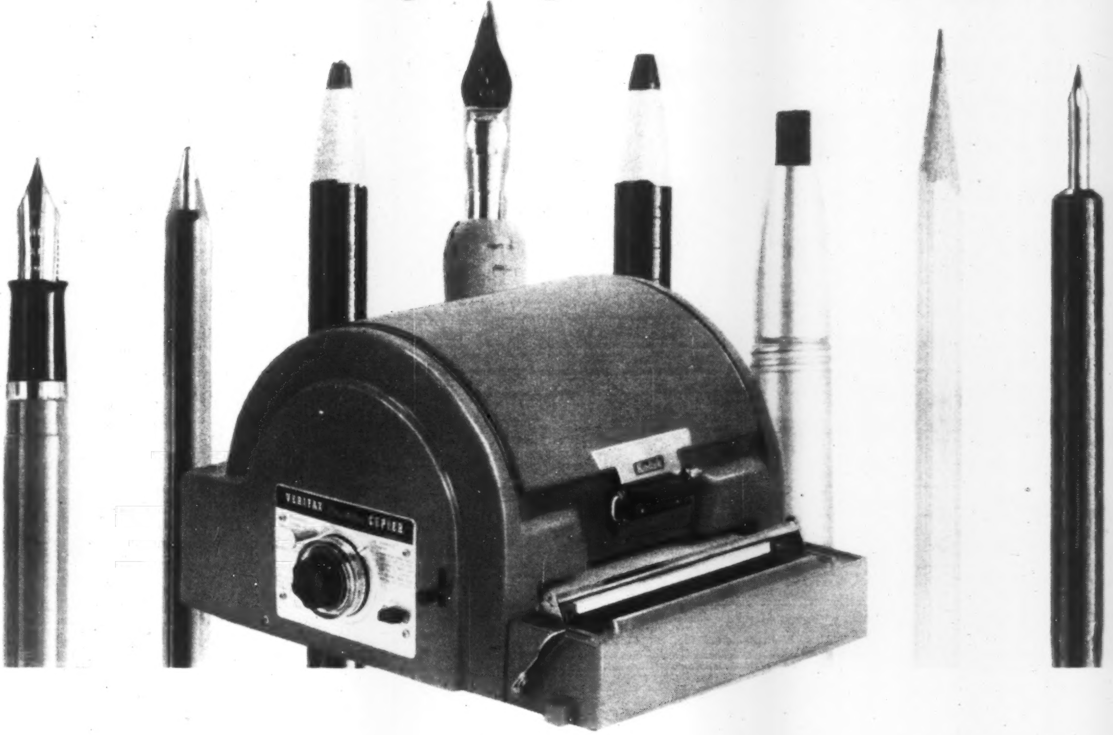

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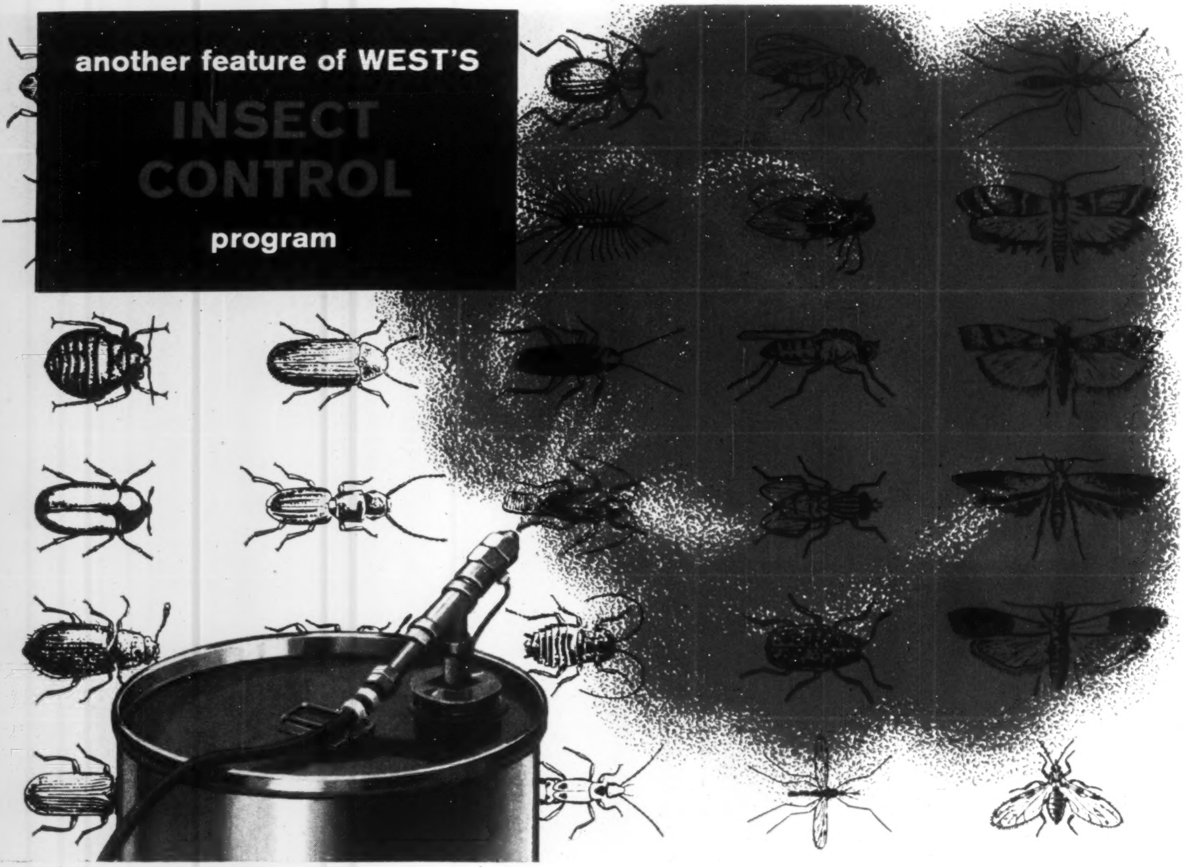

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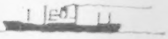
INTERNATIONAL MARKETS



GEARING YOUR SALES TO THE EUROPEAN COMMON MARKET

ALEXANDER O. STANLEY

Customer potential in this new mass market is tremendous. But to turn it into profits for your company, you'll have to key your international operations to the ECM and its timetable.

THE ADVENT of the common markets on the 1958 scene of international trade will create many-sided problems for U.S. management. During the coming months, firm and far-reaching decisions will have to be made, not only for the European common market but also for several other areas where an integrated market is either under development or in the blueprint stage. This rash of "mergers" is probably only the beginning—more are likely to come.

The term "common market" is a new one to many business men, although it's a safe bet you'll be hearing more of it in the days to come. By simple definition, a common market is an economic partnership, or merger, of a group of countries for the purpose of fostering trade within the bloc and dealing as a mass market with countries outside the bloc. Here is a rundown of a few of the common markets now in effect or in the works:

- The ECM or European Common Market involving France, Germany, Italy, the Netherlands, Belgium, and Luxembourg.
- The Free Trade Area, an extension of the ECM proposed by the United Kingdom, which would add Britain, Denmark, Norway, Sweden, Switzerland, and Austria to the combine. If the Free Trade Area plan is adopted, Iceland, Ireland, Portugal, Greece, Turkey, Spain, and Finland will be incorporated later. (This version will be referred to here as FTA Expanded.)
- ODECA or Organization for Central American Economic Development, a more modest version of the common market plan. It includes Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. A treaty program has already been worked out and is up for ratification (DR&MI, September 1957, page 97).
- The British West Indies, a political entity inaugurated early this year. It now has a common currency and hopes to develop a customs union. It includes Barbados, Jamaica, Trinidad, Tobago, the Leeward Islands, and the Windward Islands.
- The United Arab Republic, a political concoction of Egypt, Syria, and lately Yemen, which contains some economic ingredients.
- The Jordan-Iraq combine, a political answer to the United Arab Republic, or Nasser bloc, with some economic overtones.
- Other common markets are in the talking stage in South America and Africa.

Because these common markets vary in economic (and political) scope, a successful formula for operation in one may not always apply to all. But the more the common market pattern is studied the more it becomes evident that for the most part U.S. companies depending upon direct exports for market retention will face progressively increasing problems. In the long run, except for specialized products and services, the outlook for the direct exporter

SAMPLING THE AVERAGES

Here is how a few key products will be affected by the regulations tying the tariffs of the countries in the European Common Market to ECM averages. For a report on the rules, see page 45, "External Tariff Calendar."

Product	ECM average	Low tariff		High tariff	
		Country	Rate	Country	Rate
Aircraft	**12%**	**Germany**	**free**	**Italy**	**13–33%**
Commercial vehicles	**28%**	**Germany**	**21%**	**Italy**	**35–40%**
Inorganic chemicals	**15%**	**Benelux**	**5%**	**France**	**23%**
Metal-working machine tools	**11%**	**Germany**	**free–6%**	**Italy**	**7–25%**
Motors, electrical	**16%**	**Germany**	**free–8%**	**France**	**31%**
Pigments and paints	**15%**	**Benelux**	**8%**	**Italy**	**21%**
Printing, binding machinery	**11%**	**Germany**	**free–8%**	**Italy**	**15–25%**
Punchcard machines	**11%**	**Germany**	**free**	**France**	**22%**
Radio transmitters	**20%**	**Benelux; Germany**	**12%**	**Italy**	**23–45%**
Steam-generating boilers	**13%**	**Benelux**	**6%**	**France; Italy**	**18–22%**

SOURCE: Howard S. Piquet, Library of Congress

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is gloomy. The alternative is obvious: local participation through branches, affiliates, and licensees. The problems need to be sorted out within the framework of each company's operations.

Management's largest immediate stake is in Euromarket, also called the ECM or European Common Market, because it is a combination of *industrially advanced* and sophisticated markets seeking to make mass distribution viable. Let's examine how ECM's program and time schedule for development as a mass market will effect U.S. companies.

It Could Happen

Here are a few immediate examples:

Some U.S. airlines fear a common transport policy that may cut into their intra-Europe passenger and freight volume, shunting it to the European carriers. Some office equipment manufacturers build components in one country, assemble the equipment in a second, and export it to a third. They foresee the need to reshuffle assembly-line and distribution patterns to stay within the competitive picture. The expense in time and money makes management blanch. And producers of consumer items, both durables and nondurables, are concerned about intensified competition in areas where they formerly had tariff protection.

These examples indicate the problems that some U.S. companies are already having in trying to evaluate their immediate and future prospects for dealing with the common market. And with rumors of impending mergers of French, Italian, German, and Benelux companies, it is no wonder that some U.S. international executives take a grim view of the common market program. At the other extreme many European business men look to the mass market as the source of a huge customer potential. Here is a rundown of the figures that support the latter view:

	ECM	Plus FTA	Plus FTA Expanded
Population (*in millions*)	165	243	321
Gross domestic product (*in billions*)	$131	$216	$240
Private consumption (*per capita*)	$503	$567	$580

These calculations are based on estimated 1956 levels. By 1970, the gross domestic product of the ECM plus the FTA Expanded countries is expected to hit a level of some $400 billion.

These prospects presuppose: (1) no severe backlash from our recession and

(2) no serious internal hitch in setting up the intricate machinery of the ECM. Speculation on these two points is rife, but most observers believe that (1) the current U.S. recession may tend to slow down, but will not stop, eventual unification and (2) the experience gained by the six ECM countries in operating within the European Payments Union and the European Coal and Steel Community will help them in setting up the common market program.

But the problems of adjustment are compounded by the timetable. Let's see how heavily that timetable figures in all calculations.

(All reference below to duty adjustments applies only to those imposed by member countries on each other's products from basic levels prevailing January 1, 1957.)

Internal Tariff Calendar

- By December 31, 1958: a cut by at least 10 per cent of basic (1957) duty rates on each common market product entering intratrade channels.
- Ending between January 1, 1962 and December 31, 1963: a cut by at least 25 per cent of basic rates.
- Ending between January 1, 1966 and December 31, 1968: a reduction in the basic duty by an *additional* 25 per cent to be achieved in three stages, the first and second lasting eighteen months, the third, one year.
- Ending between January 1, 1970 and December 31, 1973: abolition of the remaining 50 per cent of existing duties.
- By December 31, 1963: elimination of all duties on *exports* to member countries.

These deadlines are subject to change.

At first glance the tariff schedule of revisions may seem to give American management ample planning time, but the dates are *maximums*, the percentages, *minimums*. This community of states can accelerate the rate and move up the date of duty adjustments. Now they seem rather enthusiastic about slashing tariffs to speed trade.

External Tariff Calendar

In realigning tariff schedules to achieve uniform levels for all items imported from countries outside the perimeter of Euromarket, the significant factor is that equalization, not elimination, of duties is the objective. It is this equalization that will critically affect U.S. companies now exporting directly to ECM.

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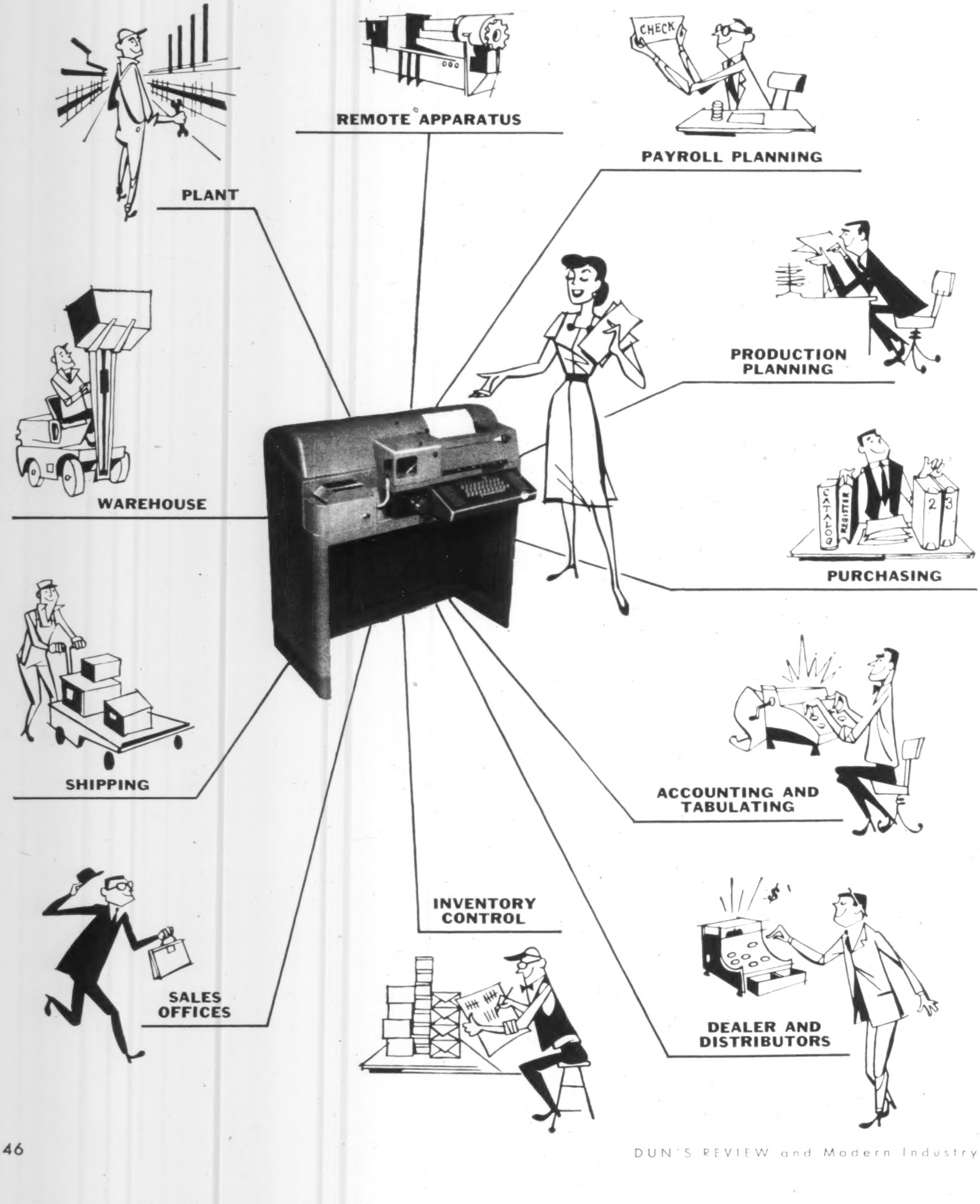
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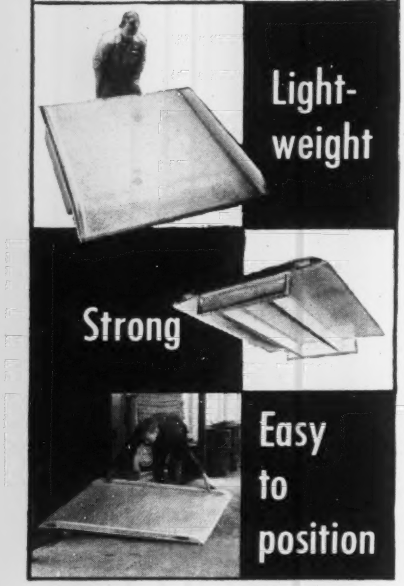

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Let's examine the formula that has been devised and how it affects the time schedule for revision of rates on individual products. All imported commodities have been separated into two groups. Category 1 consists of items with no tariffs set by an individual member country in excess of 15 per cent above or below the arithmetical average tariff of the member countries in effect on the base date of January 1, 1957. Category 2 comprises all items with tariff in excess of 15 per cent above or below the group arithmetical average. Each category has a different calendar of adjustment.

By December 31, 1961, duties on all Category 1 products will be adjusted up or down to yield the same amount on the same product in all the six member countries.

Long-Term Adjustments

Category 2 adjustments will take place more slowly.

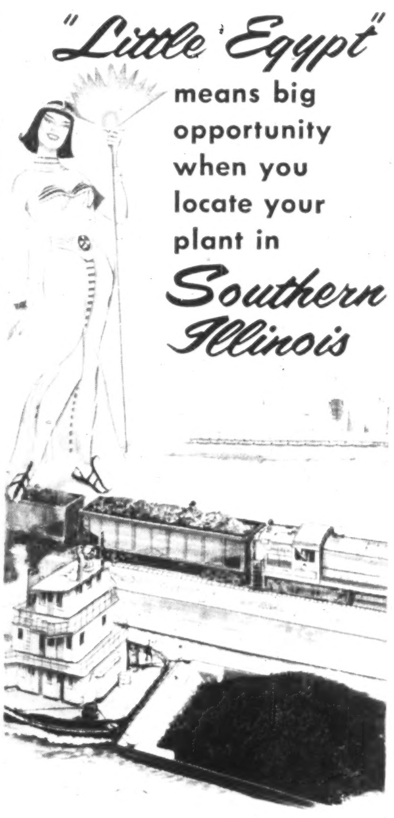
- By December 31, 1961: 30 per cent of the discrepancy between the individual and common market duty is to be eliminated.
- By December 31, 1965: a further adjustment of 30 per cent in the disparity of duties is scheduled.
- By December 31, 1972: the final 40 per cent differential will be eliminated.

(At this writing, there are certain exceptions, but most of them involve raw materials and agricultural products.)

Whether time is of the essence in your particular case can be initially resolved by weighing these factors:

- Are any or all ECM countries presently important markets for your products?
- Do you supply your customers within this territory only by direct exports from the United States?
- Will a quick elimination of *internal* duties affect your position at any point in the common market by giving competitive advantages to suppliers now operating within Euromarket?
- Are your products within the 15 per cent (external) duty differential?
- Is Benelux (the Netherlands, Belgium, and Luxembourg) or West Germany presently the best market in the prescribed area for your products? In general these are the low-tariff countries, the ones that will have to adjust duties upward in the coming months and years. Such revisions could make competition tougher.

If your answer is "yes" to any one or a combination of these points, you will probably be under immediate and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mounting pressure to adopt new marketing tactics. And even though completion of the program is scheduled to take place gradually over a twelve-to-fifteen-year period, the changes may outrace your plans if you do not move quickly. The obvious solution is a transfer of some of your international organization inside the Euromarket area. The how, the where, and the when will be discussed later.

Generally speaking, some of our major export sales will be affected sooner or later. Right now, exports of products that can be loosely classified as industrial raw materials (for example, coal, raw cottons, and steel mill products) won't be adversely affected. If anything, the industrial growth potential in Euromarket suggests a larger rather than a smaller appetite for industrial raw materials. But exports of edible and inedible agricultural products—whether for direct consumption or for industrial conversion—are bound to be restricted by agreements favoring common market members *and their colonies* when they have important stakes in the international movement of these commodities.

Manufactured goods, including automobiles, machine tools, certain types of machinery, and some chemicals, will be still more deeply affected and are of most immediate concern. Even a fragmentary study of the group in terms of dollar value and tariff sensitivity shows this to be the critical area. In 1957 seven categories of this group in order of export importance to ECM countries were: industrial machinery, chemicals, automobiles, electrical machinery, metal-working machinery, aircraft, and office machines. They accounted for $1 out of every $5 worth of products that we exported to "Little Europe" (1957 ECM imports of all U.S. products totaled about $3 billion). Actually ECM purchases of equivalent equipment or supplies were heavier from sources other than the United States. It drew on its own resources to supply almost half of some $3 billion in industrial imports. Countries outside the ECM perimeter (except the United States) shared in $1 out of every $3 spent on Euromarket's industrial needs. Of course, this analysis includes but does not break down the portion of sales supplied by U.S. companies through overseas branch plants, affiliates, and licensees, which undoubtedly provided an appreciable volume of ECM's industrial requirements.

It is the direct export group that will

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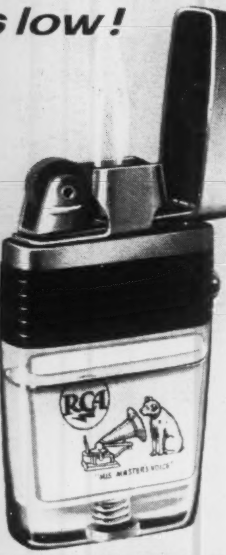

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first come to grips with the possibility of diminishing markets. To check how rearranging the tariffs in the member countries to conform with the ECM average will effect a few U.S. products, see the table on page 43.

The pattern of low duties in Benelux and Germany and high tariffs in France and Italy seems to be standard throughout the ECM tariff structure. So you can see that you will lose whatever tariff break you now enjoy in the Netherlands, for instance. Of course, the drop in duties in France and Italy may in some cases provide an entering wedge for products that until now were outpriced because of duties. It's a case of each company doing its own arithmetic.

The prospects seem best for new industries, processes, and procedures, especially those depending upon broad distribution to support high-output assembly lines.

Some Familiar Problems

But adding and subtracting tariff rates is only one factor in common market computations. QR's (quantitative restrictions or import quotas) and the attendant problem of dollar balances are the confusing equations, for they have shifting values. Countries within the ECM group may have or can apply quota restrictions on dollar imports at any time. So if in the coming months these countries have a drop in dollar-producing items (U.S. imports, net travel and service expenditures, and net transfers in capital, loans, and the variety of other activities by which dollar funds find their way abroad), import quotas will undoubtedly be the final determinant of how well you fare in exporting to the ECM.

For example, three years ago the OEEC (Organization for European Economic Cooperation), actually the foundation of the common market plan, developed an informal program to liberalize and lift restrictions on dollar imports. The result: Only about 50 per cent of dollar imports—largely raw materials, foodstuffs, and some capital goods—were freed from quotas. Manufactured goods were very much on the short end of quota concessions. There is no reason to think the formula will vary in the immediate future. And any increase in dollar deficits will surely inspire the ECM to slam the door on many dollar imports.

Within the ECM, the *intent* is to abolish eventually *internal* quotas for both exports and imports. The accent

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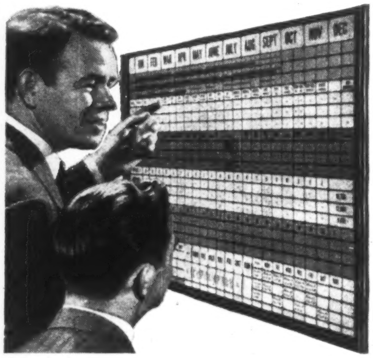

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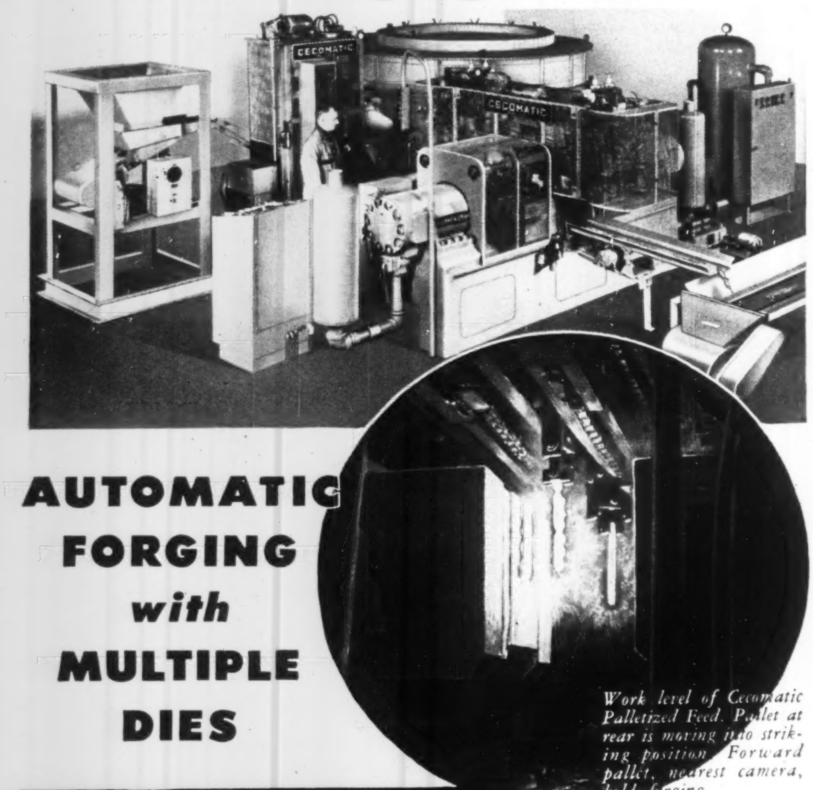
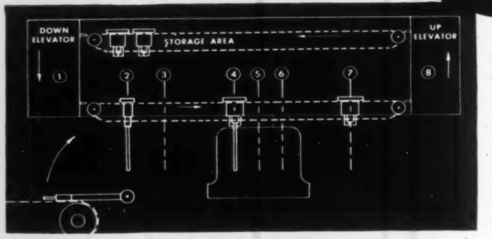


AUTOMATIC FORGING with MULTIPLE DIES

Work level of Cecomatic Palletized Feed. Pallet at rear is moving into striking position. Forward pallet, nearest camera, holds forging.



(Left) The Palletized Feed affords maximum flexibility in multiple stage impression die operations. (1) Free pallets with stock handling tongs, move from Storage Area to Load Position (2). (3) Station used if preforming of stock is desired (4, 5, 6) Pallet is successively positioned at one or more forging stations in the Impacter. Single blow is struck at each station. (7) After forging, pallet is positioned at Unloading Station. (8) Up elevator conveys pallet to upper track for return to Storage Area.

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(in adjustments) is already on equal treatment for all ECM partners. For example, bilateral quota agreements are to be made multilateral by year-end 1958. The pace of adjustments is slow but sure, with 10 per cent a year set as a minimum goal. But when it comes to *external* quotas, the program slants toward the hopeful rather than the factual. Of course there is always (or at least for the present) GATT (General Agreement on Tariffs and Trade), but it has little power. Its recently created watchdog committee can only protest drastic changes in tariffs or quotas affecting its 37 member countries. An extension of the U.S. Reciprocal Trade Agreements Act would give our Government a bargaining point.

Time to Plan

The many abstract factors involved even within the expressed formula of Euromarket make any but rudimentary projections at this time impossible. But a master-plan must be adopted, and it should be flexible so that the sequence of changes will strengthen and not weaken your position within the ECM. Actually, the need for realignment will be as vital to companies with branches already operational in this area as to those presently without local branches but working through indirect affiliations. The latter group will at least not have to make the expensive and extensive alterations that existing organizations may need.

Here are some of the problems that companies already on the ground will have to face up to. For newcomers in the European area, these same problems will point out the "do's" and "don't's."

- *Do you presently have plants located in two or more of the ECM markets?* If so, integration of these facilities may eventually be necessary. And to comply with practical rather than "political" (for example, import-export controls) considerations, relocation of these consolidated activities may also be necessary. A reappraisal of several factors is involved. When it comes to choosing the most advantageous production site, evaluations will have to be made in terms of ECM customer concentration, access to raw materials, external and internal transportation facilities, adequacy of power, and availability of housing. Labor may eventually be drawn freely from a common pool within the common market. Free interchange of labor is one objective of the Treaty. Another is uniform social se-

No matter how "smart" they make the machines, it still takes men to run them

When the holes in a die must be accurate to 2/10,000 of an inch, there's no substitute for men who know how to use precision machines. Men like Denver Haney, above, a machinist for The Mechanical Development Co., Inc. in Salem, Va., makers of dies and tools for all types of manufacturing, including atomic reactor parts.

Denver Haney is representative of the pool of highly skilled workers in *The Land of Plenty,* men with sound technical backgrounds and valuable on-the-job experience. More and more, the job opportunities and desirable living conditions in this great and growing industrial region are attracting highly skilled men.

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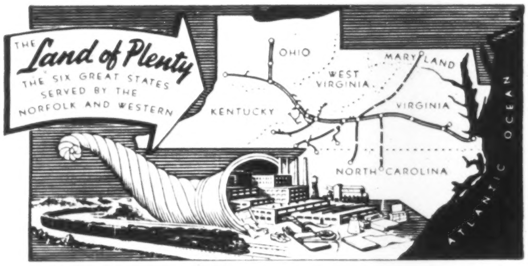
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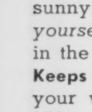

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curity and other labor laws. Whether this will lead to equalization of industrial wage patterns is a moot point, although most observers seem to think it will.

Other Considerations

Local taxation and currency values are also involved in choosing a site. Of course, each company will have to weigh these factors in relation to its own over-all requirements. In one case ready access to raw materials or power facilities may be more important than customer concentration. In other cases, where companies are interested in reaching international markets for export development or import supplies, convenient, cheap external transportation may be of overriding importance. But in making any long-term plans, a company should consider not only its present common market position but also the possibility that ECM may eventually incorporate other countries in the so-called Free Trade Area. In most cases, however, plant location within the ECM complex at this time should be advantageous whatever the final borders of the Free Trade Area.

- *Does your company have one or more plants in the United Kingdom but not in Continental Europe?* If the answer is "yes," management will have to decide whether the U.K. will be successful in getting equal trading rights in the ECM. To be on the safe side, some exploration of subsidiary contacts in the ECM should be undertaken now.
- *Does your company operate only a single plant in the Euromarket Area?* If so, it will have much the same problems as those operating several manufacturing facilities there. Whether to move will depend on whether the fast changes taking place in Europe turn the advantages of your present site into disadvantages. Projected adjustments in tariffs, quotas, and currencies and a long string of other factors may be significant.
- *Does your company function in the ECM area on a remote basis, through agents, distributors, or licensees?* Canceling existing agreements in favor of a branch operation may not be the best move. For instance, present and potential volume of sales may not be sufficient to support a branch.

But in the area of licensing agreements, some difficult adjustments are foreseen. If you are working through one licensee for the whole area, you will have to re-examine your present licensing agreements in the light of new conditions. For instance, is he well-equipped in terms of mechanical facilities, finances, and staff to stay abreast of the expanding competition that is to be expected? As new measurements are applied to licensing agreements, some far-reaching revisions will be needed for your organization and your licensee's to contend in the widening competitive race. Re-evaluation of licensing agreements is a "must."

If you now have several licensing agreements within the ECM, your problem will be compounded. Sooner or later you will have to make a choice and eliminate agreements that might impede a healthy development. But don't overlook the possibility of mergers. Even now some French and German manufacturers are engaged in exploring this solution.

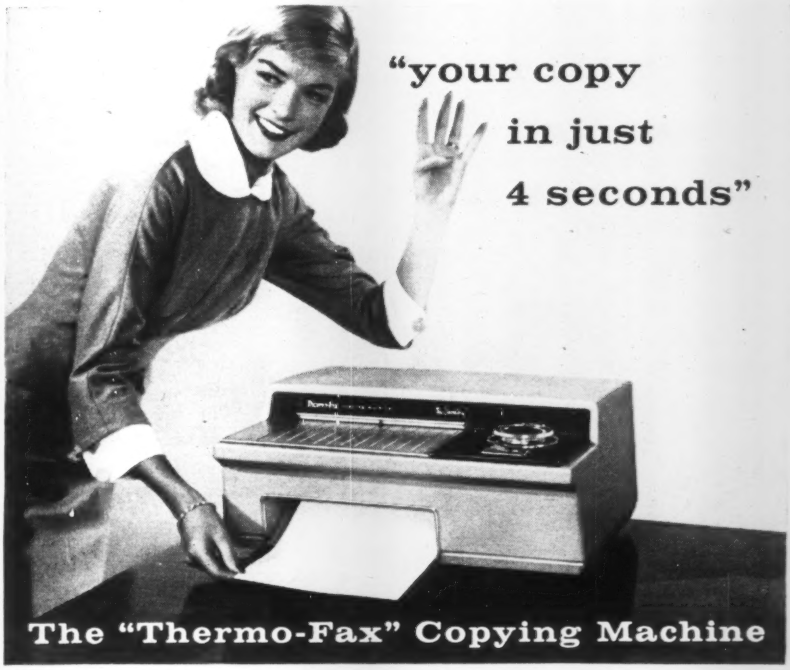
A Foot in the Door

If you have no c[illegible]ents and are dubious of risking [illegible]y capital and know-how investment in a market that must still go through growing pains, consider the compromise of buying into, or writing a licensing agreement with, European companies already in related fields. Of the two solutions, a licensing agreement is usually more flexible and in most instances will involve less financial risk, but it will give you a foot-hold in what promises to be one of the world's most dynamic markets.

Sooner or later the problems stemming from the ECM and all the other common markets that are fast developing will require constant, specialized study if these new mass markets are to be a source of future profits for your company. END

NOTE: For those interested in studying the European Common Market in detail, the following reference works will be helpful:

- *The European Common Market: New Frontier for American Business*, edited by Elizabeth Marting and based on a recent conference on the common market conducted by the International Management Association of New York. To be published in July by the American Management Association, 1515 Broadway, New York 36.
- Official English translation of the ECM Treaty. Available from the Information Service, European Coal and Steel Community, 227 Building, Washington 5, D.C., $1.40.
- In its September–October 1957 *Bulletin from the European Community for Coal and Steel*, the Information Service also listed many articles, pamphlets, and studies dealing with the common market. And other recent issues of the *Bulletin* have several reports on various aspects of the common market program.



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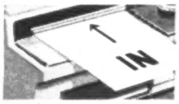

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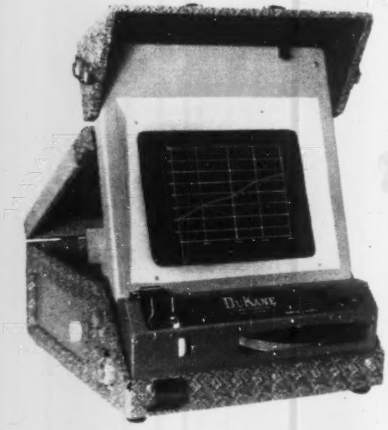

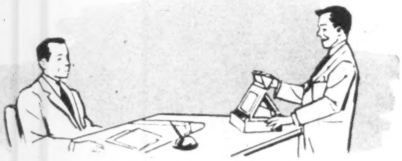

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EXECUTIVE BOOKSHELF

Brief Reviews of Timely Business Books

The results approach

EXECUTIVE MANAGEMENT OF PERSONNEL: GETTING RESULTS FROM PEOPLE *by Edward C. Schleh. Prentice-Hall, Inc., Englewood Cliffs, N.J., 208 pages, $5.65.*

Mr. Schleh advocates dealing with executives and employees (DR&MI, January 1958, page 36) by a logical but often overlooked method: start with a precise idea of the results you want and take the steps needed to achieve them with a minimum of waste motion. Here's how, in detail.

Beck, Hoffa, et al.

THE McCLELLAN COMMITTEE HEARINGS—1957. *The Bureau of National Affairs, 1231 24th St., N.W., Washington 7, D.C., 508 pages (paper cover), $7.70.*

For those who want to be sure of their facts about the Senate investigations into union activities without checking through newspaper files or the 10,000 pages of the official record, BNA has provided a handy reference tool. Findings are summarized briefly, but most of the book consists of a report on the testimony, mainly in the form of direct quotes.

Every man a king

THE CAPITALIST MANIFESTO *by Louis O. Kelso and Mortimer J. Adler. Random House, 457 Madison Ave., New York 22, 265 pages, $3.75.*

On the premise that 90 per cent of the wealth is produced by capital and only 10 per cent by labor, the authors advocate a proportionate distribution of income. To make this practical, they believe in making everyone a capitalist. Not all present capitalists, however will applaud the details of their program.

Reflections of an ad man

SPARKS OFF MY ANVIL *by James R. Adams. Harper & Brothers, 49 East 33rd St., New York 16, 171 pages, $3.*

Marketing men will find this book a source of sound observations on advertising strategy, the creative mind, buying motives, media, and copy writing.

For a better way to care for your nest egg talk to the people at Chase Manhattan

Investment problems should never be allowed to interfere with the contemplation of prowess.

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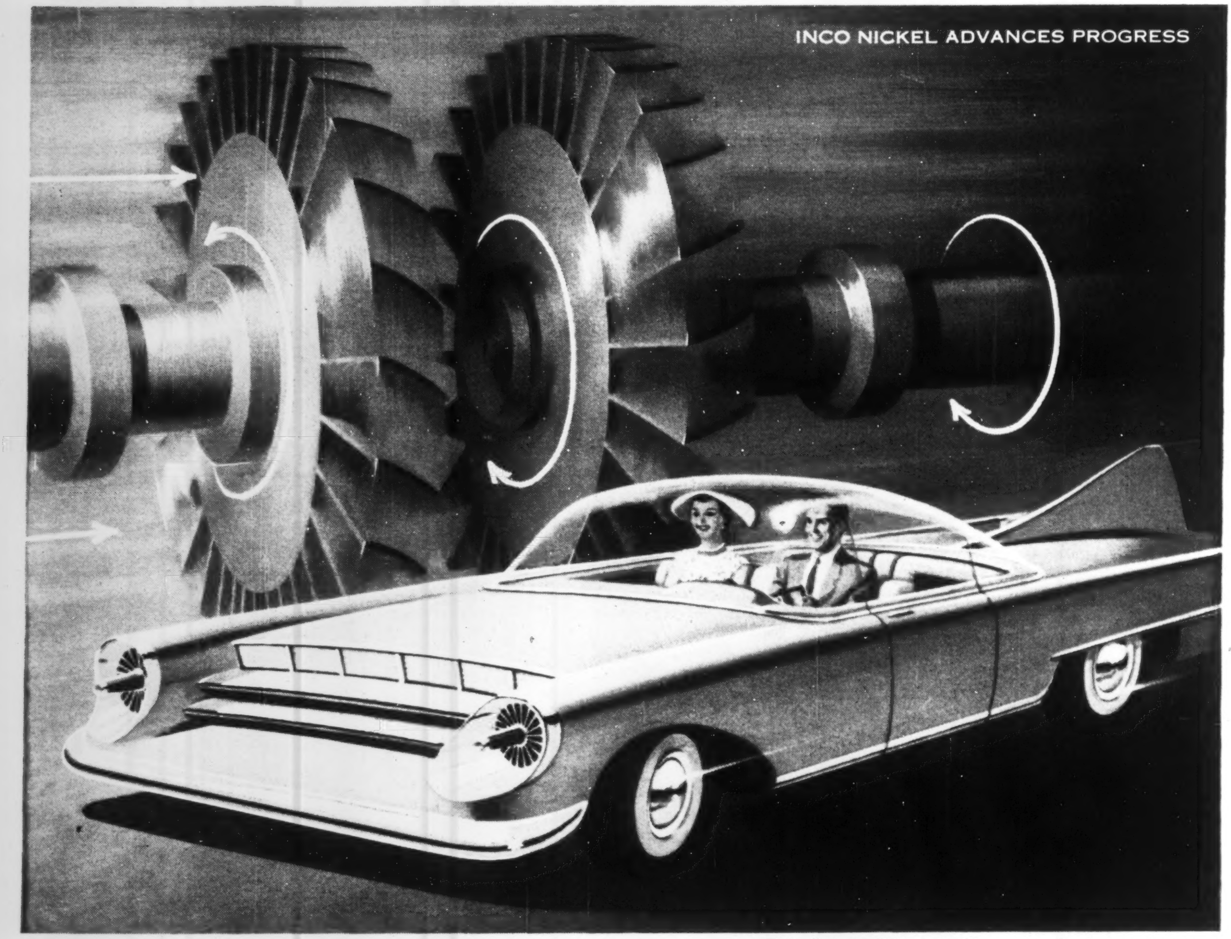

This "windmill" or turbine, spun by hot gas, powers the turbocar. For such a hot spot, designers depend on Nickel to help them solve heat-resistance problems.

How Inco Nickel is helping develop your new gas turbine car of tomorrow

It will be power-packed: the gas turbine engine in your dream car of the future. In tomorrow's trucks and buses, too.

Only one spark plug—runs on kerosene

This new, power-packed engine is much lighter, much smaller than yours. It has far fewer parts. No pistons. No water system. Only one spark plug. And it runs on lower-grade fuels like kerosene.

Not yet in production!

Before this dream car becomes a showroom reality, engineers have a number of big problems to solve.

One of the engineers' problems—the one Inco Nickel is helping with—is metals. *Heat-resisting metals!*

Gas turbine engines operate up to 1600 degrees F. These temperatures step up corrosion. So the job is to develop alloys that can carry the load—that resist corrosion—at these jet-high temperatures.

Nickel-containing alloys are just such metals

This has been proved by (1) International Nickel Company's *basic* research. By (2) the experience of jet engine designers.

More proof comes from the research efforts of the automotive and aviation industries—industries that can rely on the *expanding* capacity of nickel producers to meet the expanding demands of *modern* mass production methods.

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The International Nickel Company, Inc., New York 5, N. Y.

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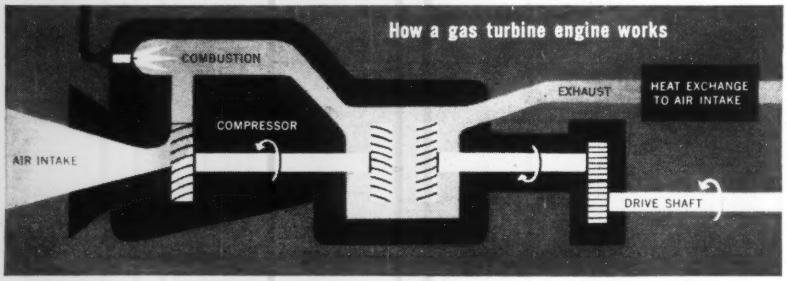

Inco Nickel

Makes metals perform better longer

INSIDE INDUSTRY . . *New Methods, Materials, and Equipment*

LONG DESIGN CYCLE PAYS OFF FOR RENAULT

ALSO: *Machine Tools Integrated Electronically*

BY SETTING the design cycle for its new cars at about ten years, Renault, Inc., of France has been able to achieve some notable production advances in its new assembly plant, which opened two years ago. Daily production has steadily risen to 900 cars a day. When all the production lines are installed, the plant will turn out 2,000 cars a day. Another economic advantage: Parts production for Renault's three lines of cars is integrated.

When Renault decided to bring out a new model about seven years ago, plans were also made for a new assembly plant devoted to that car alone. By the time the new car, the four-seater Dauphine, was set to go into production, the new assembly plant at Flins, near Paris, was ready. (Incidentally, Renault engineers say it is harder and takes longer to design a small car than a big one.)

Long-haul production problems—and costs—are cut by sticking to one model, and daily production worries are limited by sticking to one color each day. (In American auto plants, each car is often different in color as well as in dozens of other ways from the ones next to it on the assembly line.)

A number of special jigs, resembling small flatcars, were built to hold parts in place while they are spot-welded together to make the chassis frame. As the body is brazed and welded to the frame, the assembly moves steadily along a 200-foot-long railway. When the completed structure reaches the end of the railroad, it is automatically lifted off the jig, which drops down into a tunnel. The jig then moves on underground rails back to the beginning of the body-welding operation.

As the body now moves along on an overhead conveyer, doors, hood, and trunk lid are added. The height of the conveyer is carefully set to suspend the body higher or lower, depending on the operation, for the convenience of the workers.

One of the neatest tricks is the coordination of the engine assembly line with the body line so that the body can be dropped automatically over the engine-rear-axle assembly. In Detroit it usually takes several men to drop the motor into the body and the body on the chassis.

The day the plant was inspected by a DR&MI editor, the assembly line was turning out 92 cars an hour, about the same as in American plants.

Parts are delivered to the assembly line by a variety of means—fork truck, tow truck, or overhead conveyer, depending on which is most economical and flexible.

With its wide aisles, straight assembly line, and good lighting, the

The height at which these all-welded Dauphine bodies are suspended was carefully planned for worker convenience and efficiency at the new Renault plant in Flins, France. Wide-aisled and well-lighted, the factory is called the world's most advanced.

Body-assembly and engine-assembly lines are so carefully coordinated electronically that the bodies automatically drop over the rear-mounted engines without any help. The operator above is starting to make connections between the engine and the car heater.

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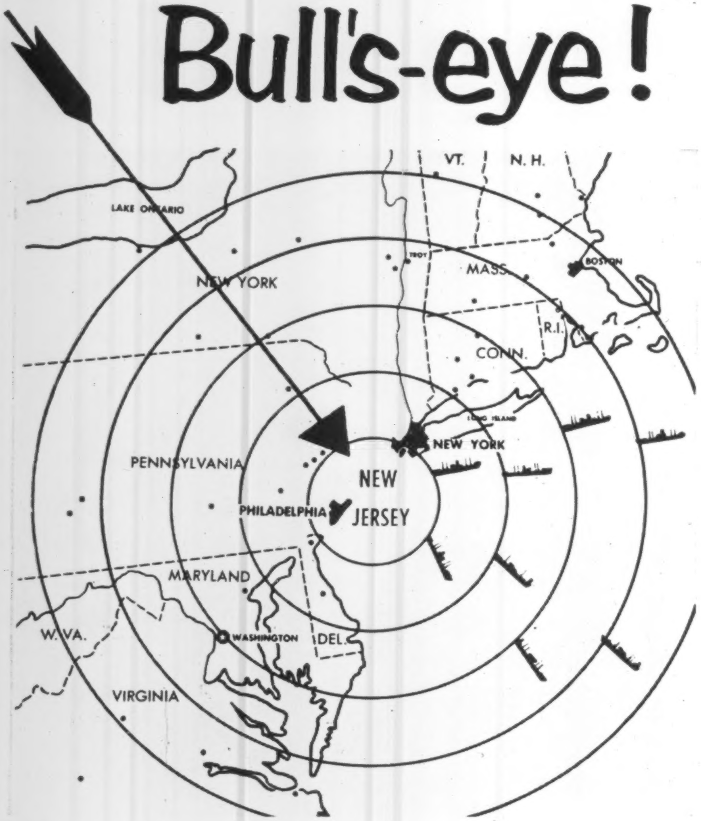

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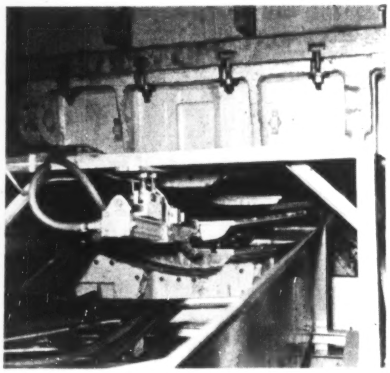


Stamped-out door panels are automatically yanked out of this clearing press by an air-operated mechanical arm at Renault, Inc.

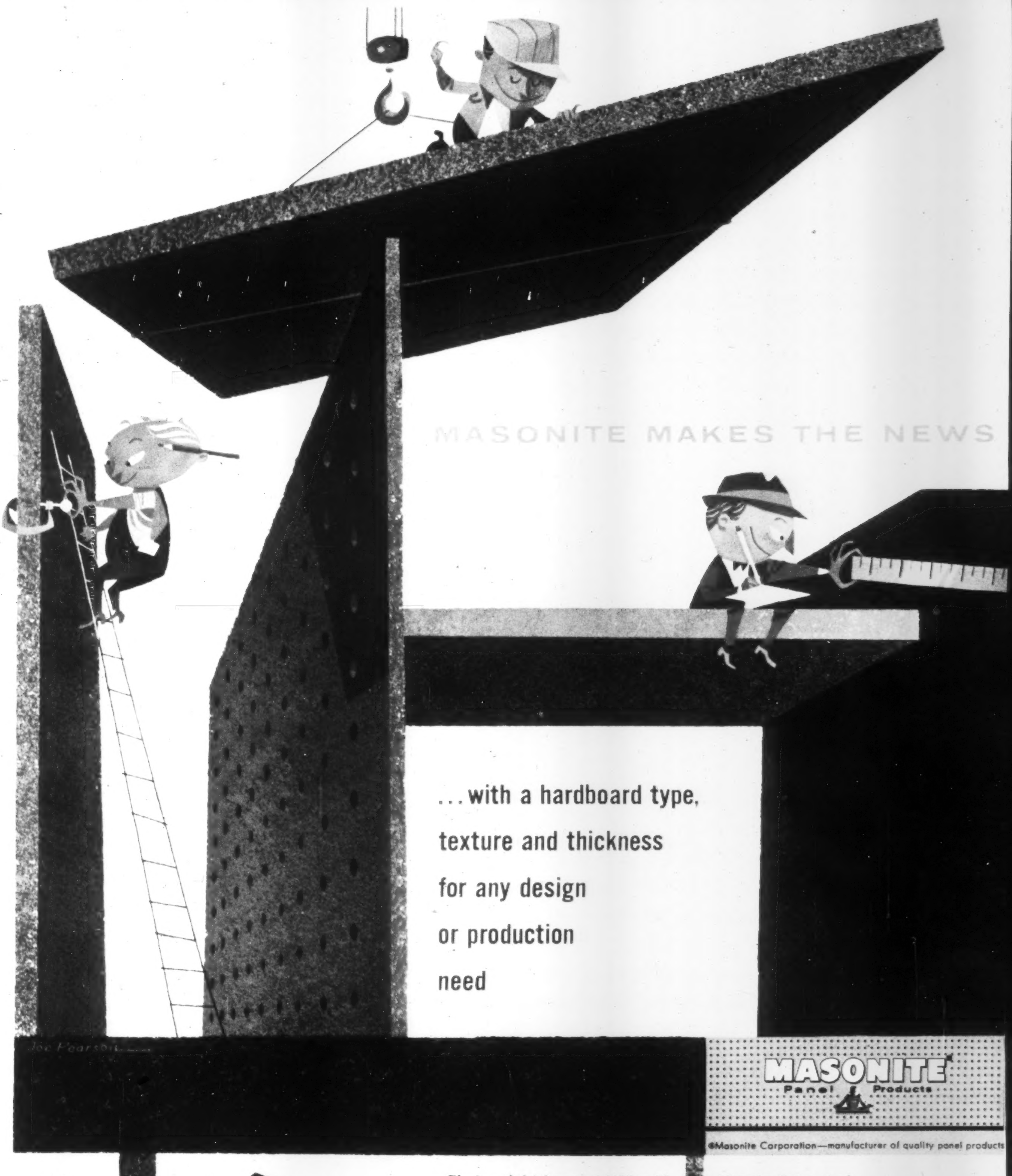
Flins plant is a lesson in plant construction, contrasting sharply with the older prewar Renault plant at Billancourt where motors for all three lines of cars are made.

At the casting plant, unusual integration of parts production has been achieved. The piston rings for the Frigate, the largest model, are cast 100 at a time attached to a tree-trunk-like support. Without adding to the cost of the operation, the piston rings for the Dauphine are cast inside the larger rings, and the valve seats for the Dauphine inside those.

The Dauphine uses the same engine block as the smaller, 1946-vintage 4CV, with a thinner, centrifugally cast cylinder liner for more power. The engine blocks are machined on an automatic, operatorless line, comparable to the automatic-transfer machines in Detroit. However, most of the metal-cutting and transfer machines (and gantry cranes, too) are home-made by Renault, in sharp contrast to American practice. But the big stamping presses at Flins are made by Clearing, either in Chicago or in France by a licensee.

Renault is a major machine-tool producer, but most of the money earned from estimated 1958 sales of 60,000 low-cost Dauphines in the United States will pay for American machine tools bought by Renault and other French manufacturers.

Although operated like a private concern, Renault is government-owned. However, only one man—Pierre Dreyfus, the president—is a civil servant. As a result, some of the lower-ranking executives receive larger salaries than Dreyfus's approximately $20,000 a year, which is low



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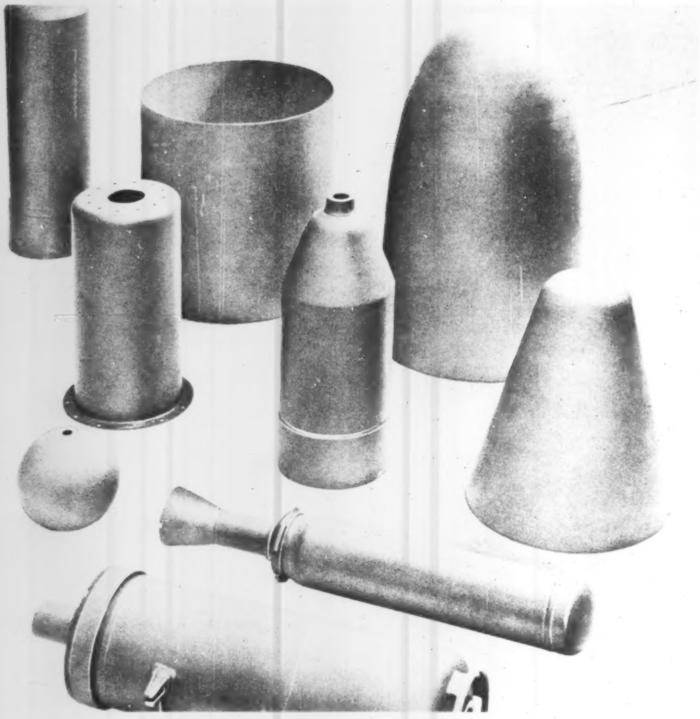
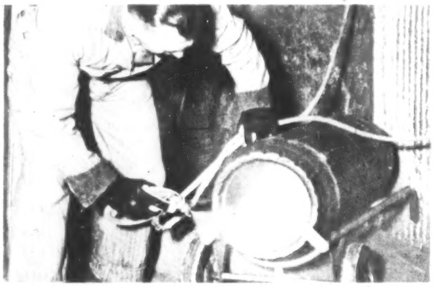


▲ **Missile components.** Space Age warfare must be conducted on down-to-earth costs. So missile designers and production men call for missile components produced by *Hackney Deep Drawing Method.* This method reduces weight without sacrificing strength, saves assembly time and reduces production costs. Often improves product appearance.

▲ **Lift truck cylinders.** LP-Gas power for lift trucks saves money. Many lift truck users are converting to LP-Gas—using Hackney lightweight, removable cylinders—noted for safety, convenience and for easy handling.

Double-bottoms. New Hackney LP-Gas Cylinders are made with double bottoms to end attacks of rust and corrosion in the area of greatest wear. It also is easier and cheaper to maintain and repaint these new cylinders. ▼



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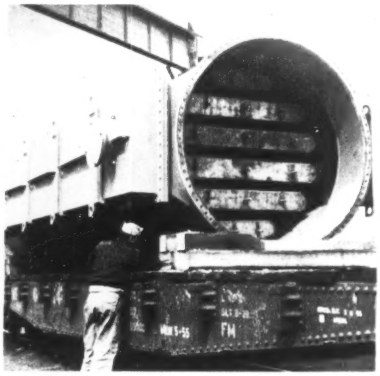

Still fabricating "first"! Downingtown Iron Works Division pioneered in building this highly efficient, welded carbon steel ammonia still. Weighed 60,000 pounds! Close tolerances were required on all parts: risers, riser slots, bells, trays and weirs. We're proud of our engineers and welders!

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Steel and Alloy Plate Fabrication

by American standards for a man who runs a 60,000-employee organization, the largest in France.

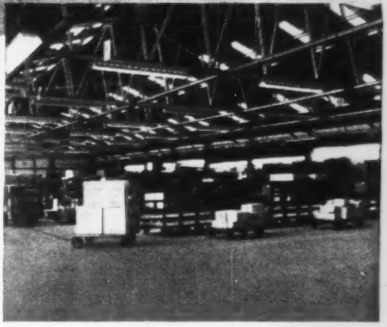
Speed-up for small-lot jobs

For the first time a line of general-purpose machine tools has been linked together electronically. Detroit has long used lines of special-purpose tools linked mechanically in million-dollar set-ups. But these tools can only make one part and only pay off in large volume. *Digitape*, the new electronically controlled system made by Hughes Aircraft Company, can be applied to small-lot production, which includes the greatest number of metal-cutting jobs. So far, a milling machine, a boring machine, and a magazine-type drill (see photo, page 62) have been linked together. But the system can be applied to four, five, or more machines, with automatic transfer between stations.

All three machines cut at the same time, and each can be working on a different kind of part. A computer takes information from three tape readers at once, interpreting the punched tape associated with each part. One tape carries the instructions for all three tools, stopping the part in front of each in turn. The tape also controls the special jig on which each part sits. While the three tools are cutting, the operator loads a fourth jig with another block. Therefore, the tools are cutting 85 per cent of the time, contrasted with about 20 per cent for the average machine tool.

The prototype Digitape line, which has been making parts for the Hughes Aircraft Company plant in El Segundo, Calif., since last Fall, can handle parts up to 12 by 12 by 8 inches in size, but the next model will take 18-by-18-by-12-inch blanks. There is no technical reason why machines for handling even larger blanks can't be made. Kearney & Treacker of Milwaukee, Wis., designed the three special tools, but Hughes will supply the system for use with other manufacturers' tools.

It takes about two days for a planning engineer to study a part and prepare the instructions for the line of integrated tools. These instructions are punched on tape in a special machine, which can be operated by ordinary office help. Only one holding jig has to be made for each part, in contrast to the six to eight jigs normally



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The new T.I.M.E. Incorporated truck terminal at Memphis, Tennessee, is a model of efficiency. Post-free interior, transparent skylight panels and many built-in features such as truck-level docks, underfloor dragline conveyor, 6000-lb. capacity overhead track and flush platform dock scales make this 80 x 120 Armco Building the last word in rapid and economical cargo handling.

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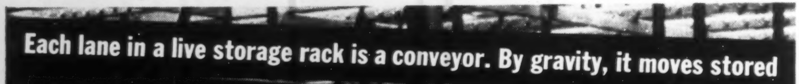

Each lane in a live storage rack is a conveyor. By gravity, it moves stored items from the loading side of the rack toward the unloading side, where they are easily removed. Live storage can be completely automatic. It saves time, creates order, establishes FIFO, provides up to 100% extra storage room. A quick-reference filing system for packages!

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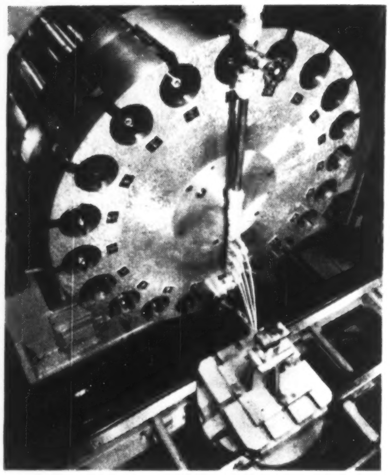

This drilling machine is one of three tools in the new Hughes Digitape line of electronically controlled general-purpose machine tools. It has a magazine of twenty different drills. A transistorized computer "reads" a punched tape and selects the right drill, turning the workpiece so that holes can be drilled in five of the six sides.

used to hold one part in a series of machines. Instead of making spare parts for inventory, only the can of tape, a single jig, and cast blanks need to be stored. Whenever a replacement is needed, the tape, jig, and blank can be mounted on the Digitape line and finished in less than 30 minutes.

Although the Digitape system has special significance for the aircraft industry, with its crash programs, short runs, and frequent design changes, it can be applied to any short-run metal-working operation making parts that come within the workpiece limits of the system.

An informal DR&MI survey of top production people in the airplane industry revealed considerable enthusiasm for the Digitape system. As one leading engineer puts it, "This means that we're finally ahead of the British in electronic control of machine tools." All of the 100 or so numerically controlled contouring millers in the United States, each of which is more complicated than any of the single tools in the Digitape line, are used in the aircraft industry.

The Hughes system costs about $125,000 per tool and associated tape reader, so that the present three-tool system costs $375,000. However, the inventors of the system say that it can pay off in about two years if properly loaded. —M. M.

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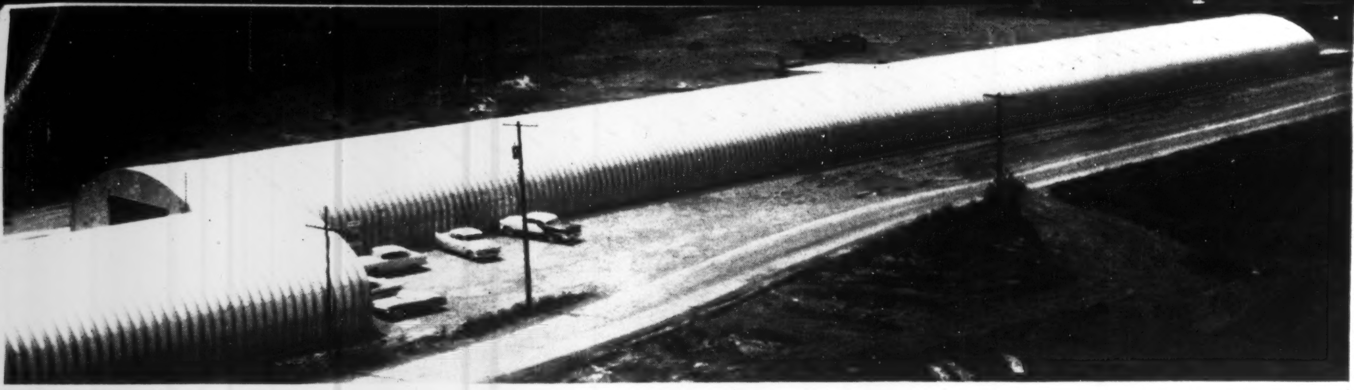

500 feet long and 48 feet wide, this building was made entirely of deeply formed 18-gage USS Galvanized Steel Sheets.

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◀ **Bolting is quick and easy and, inside, every foot of space is usable because the roof and sides are made from a series of galvanized steel sheet arches that support themselves.**

USS **United States Steel**

TRADEMARK

BETTER HIGHWAYS

continued from page 33

and equipment. But that's peanuts compared with the long-range outlook.

Construction requirements alone are stupendous. The American Road Builders Association offers these estimates of total needs between 1956 and 1972:

Bituminous material	130 million tons
Cement	1.5 million barrels
Explosives	2 billion pounds
Paint	75 million gallons
Petroleum products	13 billion gallons
Steel	50 million tons
Traffic signs	12 million units

Manufacturers of heavy construction equipment are anticipating a rise in sales of 150 per cent or more when the maximum demand is reached, according to ARBA. A big market for items as varied as aluminum, seeds, fertilizers, chemicals, engineering and surveying tools, electronic digital computers, photographic supplies, light bulbs, and even aircraft is also predicted.

When the program reaches its spending peak in the early 1960's, about 442,000 men will be employed on highway construction—22 per cent more than in 1956. The rule of thumb is that it takes three men behind the lines to supply equipment, materials, and services for each worker on the job site. If that holds, the program will eventually account for more than 120,000 nonconstruction jobs.

Meanwhile, one out of every seven workers depends on highways for his job. That includes the manufacturing, sale, servicing, and commercial use of vehicles. As highway use increases with the completion of new and improved roads, this employment will grow.

Industrial Strips

In discussing other effects the highway program will have on business and industry, E. M. Boerke, president of the Society of Industrial Realtors, points out that industry today wants lots of land for its big facilities, so much in fact that few metropolitan areas can accommodate them. (For example, ten of the newest Westinghouse manufacturing plants are on sites averaging 90 acres each.) As a result of this trend, Boerke says, industry is locating new plants in corridors, or strips, along major highway and rail routes. Of course, these corridors are

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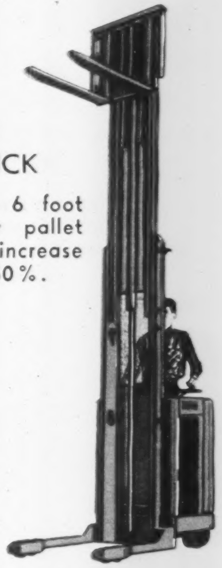
with one of these RAYMOND narrow aisle pallet trucks!



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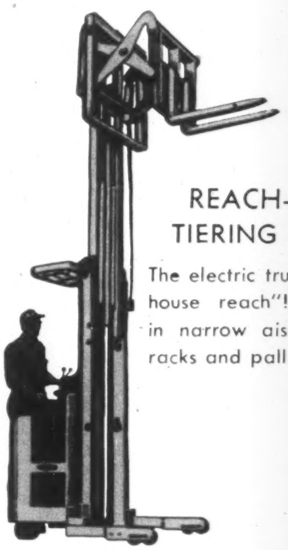

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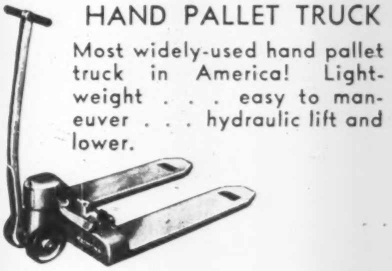

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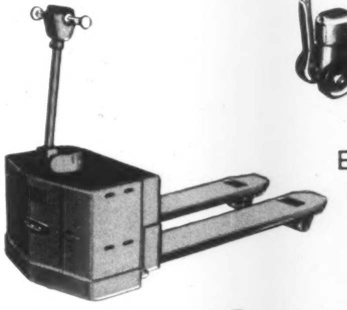

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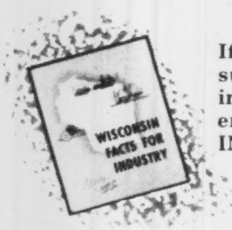
Three years ago, All-American Scoreboard Corporation began to outgrow its original Pardeéville plant. Neighbors in town saw what was happening. They got together and raised $80,000 to finance a new factory. Then, when construction lagged, the community took the initiative again. A crew of 100 volunteers took a day off from their stores and offices to put a roof on the building. They nailed down 30,000 board feet of lumber in seven hours!

In Pardeeville, as in other Wisconsin towns, folks seem to know how to get important jobs done. *Everybody pitches in!* Call it community spirit. Or call it good-neighborliness. By any name, it's an asset Wisconsin people have and to spare. *No wonder this triggers industrial progress!* National and local firms are currently investing more than $150 millions in Wisconsin plant expansions.



If you want to know more about the grass roots support Wisconsin Communities offer expanding industry, write Robert Koob in the Governor's Office, Madison. Ask for the WISCONSIN INDUSTRIAL FACT BOOK.

Division of Industrial Development
Governor's Office
Madison 2, Wisconsin

WISCONSIN did

satellites of metropolitan areas. They do not go on endlessly along an expressway, for as Boerke says, "We are not going to have many large plants (100,000 square feet or over) out in the cornfields." But an immediate result of the interstate program will be the development of an industrial fringe around metropolitan centers.

In the long run, the modernized highway system, linking nearly every U.S. manufacturing center with high-speed roads, will set the pattern of U.S. industrial growth for several decades.

Industrial realtors are plugging for a maximum amount of prime industrial land along the new highways and for the integration of other systems of transportation with the new roads. Rights of way that will best serve industry are being discussed with state highway commissions. The thorny problem of getting prime industrial land zoned for industrial development, by nature slower than commercial or residential development, is also being tackled.

Land values are kicked sharply upward by the new expressways. In some areas along the 427-mile New York Thruway, prices rose from $600 to $6,000 an acre. In communities near Boston's 24.9-mile Route 128, they jumped as much as 700 per cent. Right-of-way land for the Baltimore-Washington Parkway was acquired for $250 to $350 an acre. Now property adjacent to it sells for $3,500 an acre.

THE AUTHOR • A free-lance writer on business subjects, Ravy Mitten served for six years with U.S. Chamber of Commerce as editor of legislative publications. Mr. Mitten began his career on the staff of the Akron *BEACON JOURNAL*. After five years, he went on to spend another five years in the Washington Bureau of the Knight papers. Born in Akron, he now lives in Washington, D.C.

Business Magnet

Sales appear to be brisk, too. For example, 140 new companies (not including eight industrial parks) had sprung up in communities along the Boston expressway by last December. Eighteen more were under construction. A year ago the New York Thruway had already attracted $400 million in new industries and businesses.

The superhighways attract not only industrial plants but also huge shopping centers and even office buildings. For instance, the big Westchester shopping center grew up along the New York Thruway.

Will the big cities get hurt in the long run?

Generally speaking, the answer is "no," but some city planners are afraid that cities will be hurt unless highway officials plan the location of the new roads in close cooperation with housing authorities and others responsible for urban redevelopment.

Dressing Up Downtown

Central business districts are not likely to suffer. Actually, because of the prospective stimulus to business activity from the new highways, plans to improve city interiors are being emphasized. In several large cities (Denver, St. Louis, Baltimore, Cleveland, Indianapolis, and Pittsburgh, for instance), business men already have planning programs under way.

Decentralization of industry as a result of the highway program will be confined to moves that will help in the redevelopment of slums and other blighted city areas. There will be no wholesale scattering of housing, customers, or labor, according to Gen. Prentiss of ARBA.

It has been demonstrated that expressways benefit cities by rerouting heavy through traffic and providing access connections with the city interiors.

Eventually the highway program might even reverse the flight of residents from cities. This would mean that many people would live in and around cities and drive out to work.

A recent industrial survey cites General Electric as saying that one of the company's important gains from locating along modern cross-country highways is "transportation facilities for our employees."

Other benefits pointed out by GE are:

- The availability of intercity and interstate truck lines.
- The advertising obtained by having a plant visible from an expressway on which thousands of people pass daily.
- The economy in setting up a system of satellite plants that are easily accessible to each other. For example, GE's electronic plant in Syracuse is relatively near, by the New York Thruway, to other G-E plants in Buffalo, Auburn, Utica, and Schenectady.

The industrial development already stimulated by the interstate roads, of which 6,000 miles (free and toll) are now in operation, includes some plant relocation but mainly represents expansion. The effect is a spread-out that will grow with the highway system.

Those closest to the program believe

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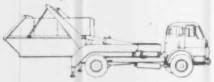
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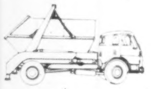
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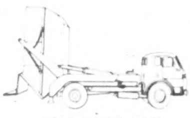
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that it will mean greatly expanded business and savings—in lives as well as dollars.

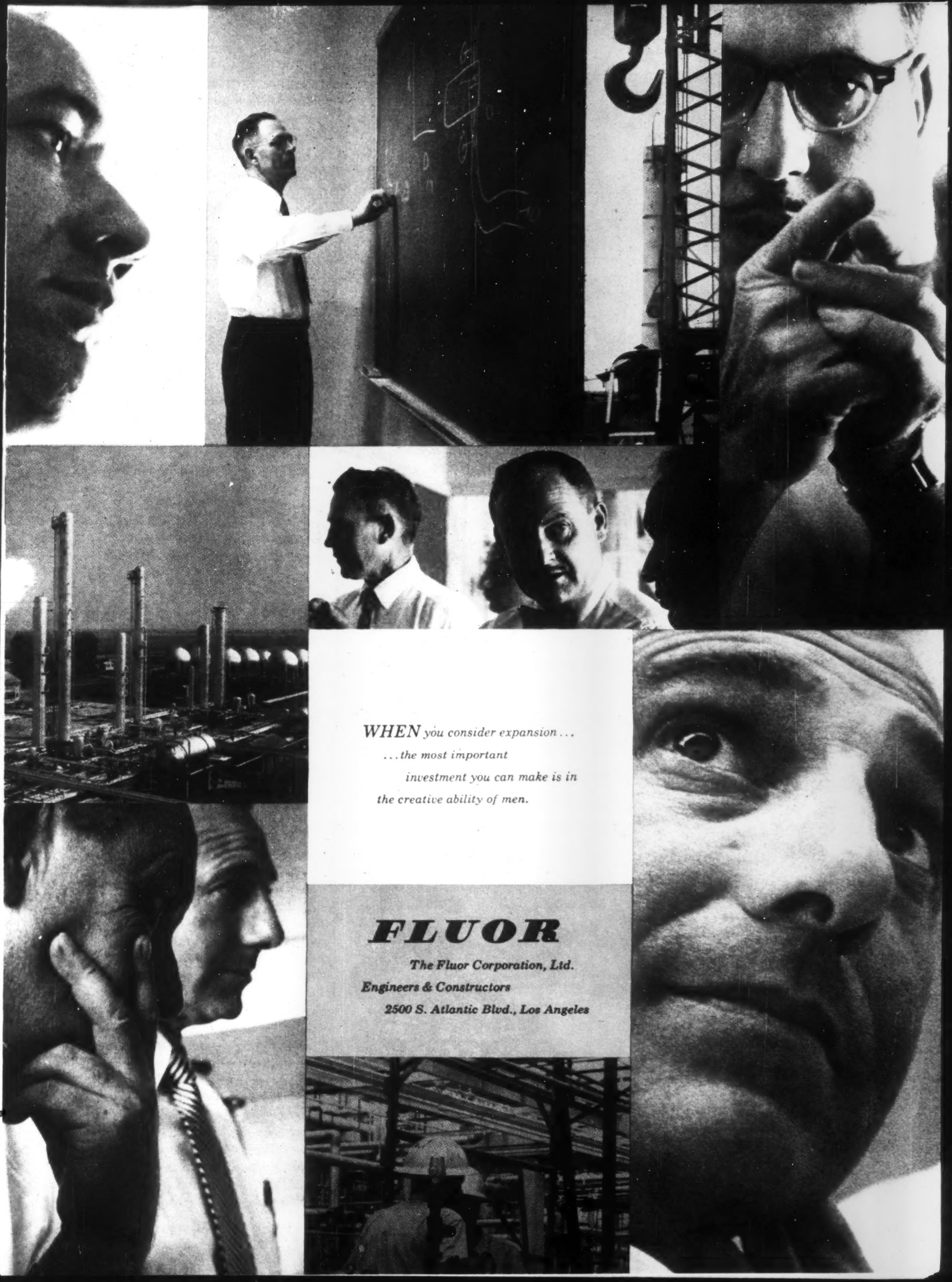
Two out of five traffic deaths are caused by narrow, congested, winding highways. And there were 40,000 traffic deaths in 1956. The fatality rate on divided-lane, controlled-access highways is 50 per cent less than that on other roads and streets. When complete, the interstate system is expected to carry 20 per cent of total vehicle mileage. This should mean fewer traffic fatalities and reduced vehicle insurance rates.

Counting the Blessings

Here are a few other detailed advantages that should result from completion of the highway program:

- Freer, faster movement of materials between major manufacturers and their suppliers should lower production costs.
- Less wear and tear on the one out of every three trucks and one out of every seven autos owned and operated by farmers should mean that farmers will be able to ship produce faster, and hence farther. With expansion of the farmers' markets, better food at lower prices should be available to all.
- Motorists generally should save an estimated $500 million a year through lowered operating costs.
- It is estimated that commercial vehicles will save $825 million a year. For example, one happy trucker whose vehicles regularly ply the New York Thruway says his trucks seldom suffer a scratch now and his yearly insurance bill is down by $50,000—more than enough to cover annual toll charges of $48,000. He is able to recap 75 per cent of his tires, compared to 25 per cent in pre-Thruway days. And the elimination of steep grades permits the use of smaller, lighter tractors—which cost less to begin with and can carry heavier payloads.
- Travel, which is among the top three industries in 26 states, will get a boost. And this will mean not just a boost for hotels, motels, and so on but for all kinds of vacation equipment.

In fact, the stimulus of the new highways is likely to be felt all the way from Detroit and its automobile plants to local real estate dealers, builders, suppliers, bankers, and insurance agencies. From a capital investment viewpoint, this national road-building program could prove to be America's most significant domestic achievement. END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FUTURE EXECUTIVES

continued from page 35

Finding the company that is right for him, and performing successfully within it, is not so simple as the college senior may imagine. If he has shown some ability, he may receive a dozen or more offers. How can he determine which company will give him the best opportunity to build a satisfying career? A wise choice is just as important for the company hiring him as it is for the young man himself. Both have a stake in his success.

At American Brake Shoe, we urge men we interview to realize that a career, rather than a job, is involved. It's not enough to examine the financial statement or credit rating of the company. Financial strength alone does not guarantee a fair chance for the recruit.

Nor, we point out, is it enough to get into an expanding and important field. The automobile field expanded, but most early automobile manufacturers went out of business. If the company is to remain profitable—or even solvent—it must take steps to meet competition, to diversify, and to keep abreast of the future. It must be willing to risk stockholders' money on research.

An extremely high starting salary may be a great advantage—or it may be a signal that the company has to pay that much to offset disadvantages. A job with a prestige title but no basic training (like special assistant to a top executive) may lead the recruit into a blind alley, with nowhere to go after his chief retires.

Stop, Look, Look Again

The recruit should not be pressured into a quick decision because "the company can't wait." This statement is seldom true. Most worthwhile opportunities will stand still for examination. In fact, executives who are serious about management development will not hire in too much of a hurry. They want to become well acquainted with the candidate—and in the process the candidate can learn a great deal about them and about the company.

A plant visit will enable him to get his own impression of the company climate. Also, he can ask men who graduated a few years earlier and went into this same company how they are doing and what their opportunities are today. Are they still sold on the company? Are they happy in their work? Are they satisfied with their financial progress?

Whimsical as it may seem, we think

the first thing a young man should look for in a job offer is the possibility of happiness. This viewpoint is more practical than it sounds. Our experience has been that the man who enjoys his work can give more to it and, therefore, has a greater chance of succeeding.

It's foolish to urge a man into a production job if he would rather do research. In one of our divisions we have a vice president of manufacturing whose eyes light up at the sight of the daily production reports. To him, they are exciting reading.

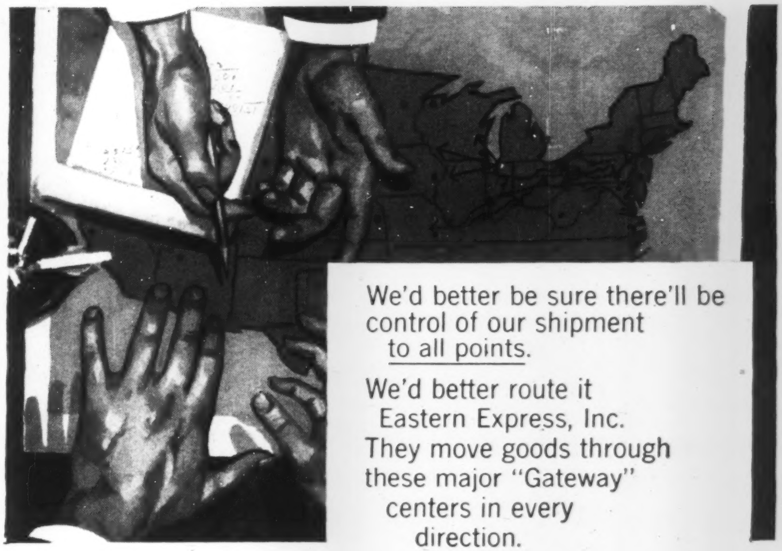
But we also have lab men who would be bored with production. Once they've figured out how to make a product or conduct an operation, they want to move on to the next problem.

THE AUTHOR • Before becoming chairman of the board of American Brake Shoe Company, William Barns Given, Jr., was its president for 21 years. Under his leadership the company expanded into a large, diversified manufacturing enterprise. A zealous advocate of division of responsibility in company management, Mr. Given has expressed his management philosophy in two books, *Bottom-Up Management* and *Reaching Out in Management*, both published by Harper & Brothers. He is a director of several concerns besides his own and a leader in church work in New York City.

Most production men hate the thought of selling. Conversely some of our salesmen, even though they have excellent technical backgrounds, see little fun in manufacturing. There is room in a business for all these types and more—and each will achieve most and give most to his company if he does the work that makes him happy.

Actually, a decision on a field of activity is one that few can be sure of at the age of 22. That is one reason for our flexible training program, with considerable mobility between departments and divisions, at American Brake Shoe.

A surprising number of recruits have changed their minds. For example, a purchasing vice president and a district sales manager started as apprentices in production, and at least one engineer began in sales. One of our most valuable production men had his heart set on research. As a researcher, he developed a special process of precision casting. It became his responsibility to teach this to production people. He enjoyed the



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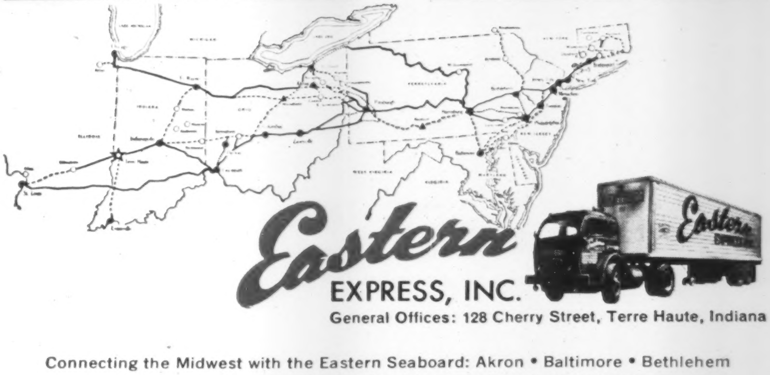

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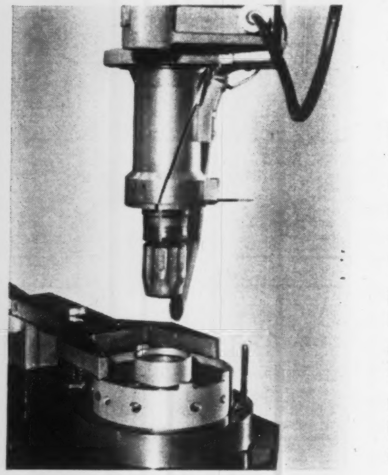
Consistent Accuracy—Maximum Production

Success of modern mass production invariably depends on complete interchangeability of parts. Thus, processing procedures that provide consistent accuracy at high production rates are required—Microhoning machines having automatic Microsize gaging assure "all parts are created equal" at a faster rate and at lower cost.



The variety of work piece and processing factors that influence automatic sizing are too diversified to be encompassed by a single gaging technique. Thousands of Microhoning applications have verified this fact. Therefore, through its continuing program of research and development, Micromatic has designed several automatic gaging devices—each provides advantages for specific types of use. Typical of features to be found in Microsize controls are the following two examples:

EXPANDING GAGE MICROSIZE

1 Gage wear held to a minimum—gage enters work collapsed.
2 Fine size adjustment through a range of .010" on diam.
3 Geometric accuracy—free-floating tool and/or part.
4 Diametric accuracy—.0003" or less.
5 No limit on maximum bore diameter to be gaged.

GAGE RING MICROSIZE

1 Simple to operate and maintain.
2 Geometric accuracy—free-floating tool and/or part.
3 Diametric accuracy—.0003" or less.
4 Gages bores from .120" to 4" diam.
5 Only honing tool enters bore—nothing to mar finish of soft surfaces.

The real answer to efficient automatic gaging is found in applying the right gaging technique to each job—it is here that Micromatic "know-how" can be of vital service to you.

Learn why Microhoning will give efficient stock removal, closer tolerances, accurate alignment and functional surfaces.

☐ Please have a Micromatic Field Engineer call.
☐ Please send Micromatic literature and case histories.

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COMPANY__________

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experience so much that he asked to be transferred to production.

Although they changed fields, none of these men felt their apprenticeship had been wasted. They learned the fundamentals of working with people, which remain the same in all management jobs.

Apprenticeship Is Not Cloud 7

The recruit should not be led to expect a perfect situation. Most companies interested in executive development will do some adjusting to the learner—but he too must adjust to the company.

The point is that in industry the recruit is still a learner. He must be willing to learn the jobs he will later supervise. He must be prepared—and if necessary taught—to exercise considerable tact. The man who shows him how to make a mold or pour a casting is probably not slated for a management job. This creates a delicate situation, which will deteriorate if the trainee parades a sense of his superiority.

One of the most important assets a manager can have is the respect and liking of hourly paid employees. If he can't earn this liking while he works shoulder to shoulder with the men, he isn't likely to earn it later on.

A feature of business life that may be fairly new to some trainees is team play. At school, the student earns his grades primarily by individual performance. In industry too he'll have the opportunity to shine as an individual, but he will also be judged by his ability to function as part of a team. That is, he must learn to give his best in cooperation with others and, in turn, inspire them to do their best when they work with him. My company seeks men with a record of extracurricular activities, because they have usually demonstrated some ability to play with a team and lead a team.

So far we've been considering management development in general. It may help at this point to refer specifically to the program I know best, that of the American Brake Shoe Company.

Our program is founded on two promises. First, we know that a bright college graduate can often step into a job that will pay him more than a trainee's salary and that will give him rapid advancement—at least for the first few years. When we ask him to give up these advantages for an apprenticeship we promise him, in effect, an opportunity for more solid, satisfying accomplishment in the future.

Second, we promise the company

that, for the time and effort invested in training the recruit, it stands a good chance of getting that most valuable return—a skilled and effective manager.

We do our utmost to deliver on these promises.

Choosing with Care

The first step is selection. We use college grades and even faculty recommendations only to screen the men. We learn most about a candidate through prolonged personal contact, leisurely conversation, and plant visits. We don't hesitate to spend days considering one man.

We have found no single type of "promising" trainee. When first interviewed as a college senior, one of our vice presidents was shy and gawky. Another man, who has gone about as far, was poised and polished from the start. There are career opportunities for introverts and extroverts, for graduates of Ivy League schools and state colleges. What they must have in common is the will to accomplish and a capacity for work.

Over the years some of our best recruits have been men who wanted to come to the company for a specific reason—because some phase of our operations had special appeal for them. Many of these men did not go to college.

We tend to fight shy of the candidate who asks, "Where will I be three years from now?" Such a question is unrealistic. The candidate is old enough to understand that where he will be in three years—or ten years—depends largely on what he can contribute to the company. He should therefore be more interested in finding out whether he has the needed abilities and whether the company will help him develop and use those abilities.

It's neither healthy nor expedient to buy trainees by outbidding the competition. The best men are attracted by over-all opportunities rather than by the highest salary offer. Nevertheless, we find that a company trying to recruit top men must offer at least the average starting salary.

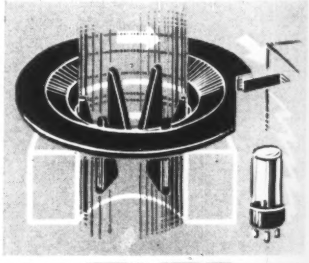
At American Brake Shoe the first year of training is called apprenticeship. It is a period of hard labor, both mental and physical. Whether the recruit aims for a career in production, sales, or engineering, his first year is spent largely in learning the basic production jobs. He must know first-hand how to perform every step in creating a product. If he's assigned to a foundry, for example, he may spend several weeks un-

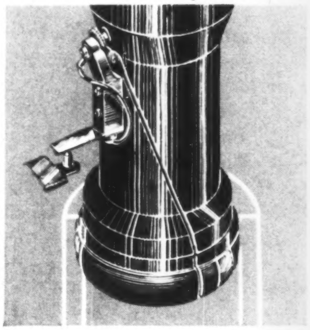
How MICROHONING

Provides Lower Cost—
Consistent Accuracy—Maximum Production

Inherent characteristics of the Microhoning process are: rapid stock removal—generation of geometric and dimensional accuracy—ability to produce any desired functional surface finish. By using automatic Microsize controls, Microhoning's economies for precision processing can be fully utilized.

Today, there are several different types of automatic Microsize gages. The type best suited for individual applications can only be determined by considering the workpiece and processing factors. How automatic cycling of Microhoning machines is accomplished by using Microsize gages is indicated by the following typical examples:





GAGE RING MICROSIZE

The gage ring, which is mounted above the workpiece, has an I.D. equal to required bore diameter. When bore has been Microhoned to size, plastic tabs on the abrasive sticks contact I.D. of gage ring causing it to turn. This movement triggers an air switch or an electronic pickup to initiate the ending of Microhoning cycle. Production-proved diametric accuracy on bores from .120" to 4" in diameter is .0003" or less.

EXPANDING GAGE MICROSIZE

This gage reciprocates in synchronization with the Microhoning tool but is not attached to it. Entering the bore on every downstroke of the tool, the gage expands only at the bottom of each stroke. When gage expands to required bore diameter, two preset electrical contacts meet and initiate the ending of Microhoning cycle. There is no limit on maximum bore diameter that can be gaged—diametric accuracy held to .0003" or less.

To most efficiently meet each automatic sizing requirement, Micromatic employs a wealth of experience in the use of air, liquid, electronic and mechanical controls.

☐ Please send me your movie "Progress in Precision" in time for showing on ________________ (date).
☐ Please have a Micromatic Field Engineer call.
☐ Please send Microhoning literature and case histories.

PRECISION PRODUCTION THROUGH MICROHONING
MICRO MATIC

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CLASS IN KNOW-HOW: Three management trainees receive on-the-job instruction in how to operate a magnetic permeameter at Brake Shoe's Research Center in Mahwah, N.J.

der the supervision of old-timers, learning how to prepare sand for a mold, how to make the mold, how to examine scrap, how to melt and pour metal, and how to perform such operations as storage and shakeout, cleaning, finishing, preparing the product for shipment, control of shipment, and control of inventory. He stays with each job until he can do it by himself, and then he writes a report on what he has learned. This training equips him to understand the quirks and problems of production and to judge and plan the work of others.

Work is done during the training period, but the aim is teaching. The supervisor who is pressed for manpower may be tempted to assign the youngster to some technical job—drafting, designing, or calculating—in which he can be of most immediate use. But this would frustrate the aim of the training program: to develop rounded management people.

This doesn't mean that the program is rigid or formal. At any point the trainee may be switched to a special assignment. He may be asked to assist a foreman or even to substitute for a foreman who is away. He may be handed a project to carry out on his own—for example, to plan, build, and equip a storeroom.

A job like this, coming when the trainee is ready for it, satisfies his desire for responsibility and accomplishment. He may get less done than an older man, and he may ask many more questions. But the supervisor is acting as a teacher, not as an efficiency expert. He will be wise to control his impatience and to encourage rather than discourage the "foolish questions" that stem from the recruit's normal, constructive curiosity.

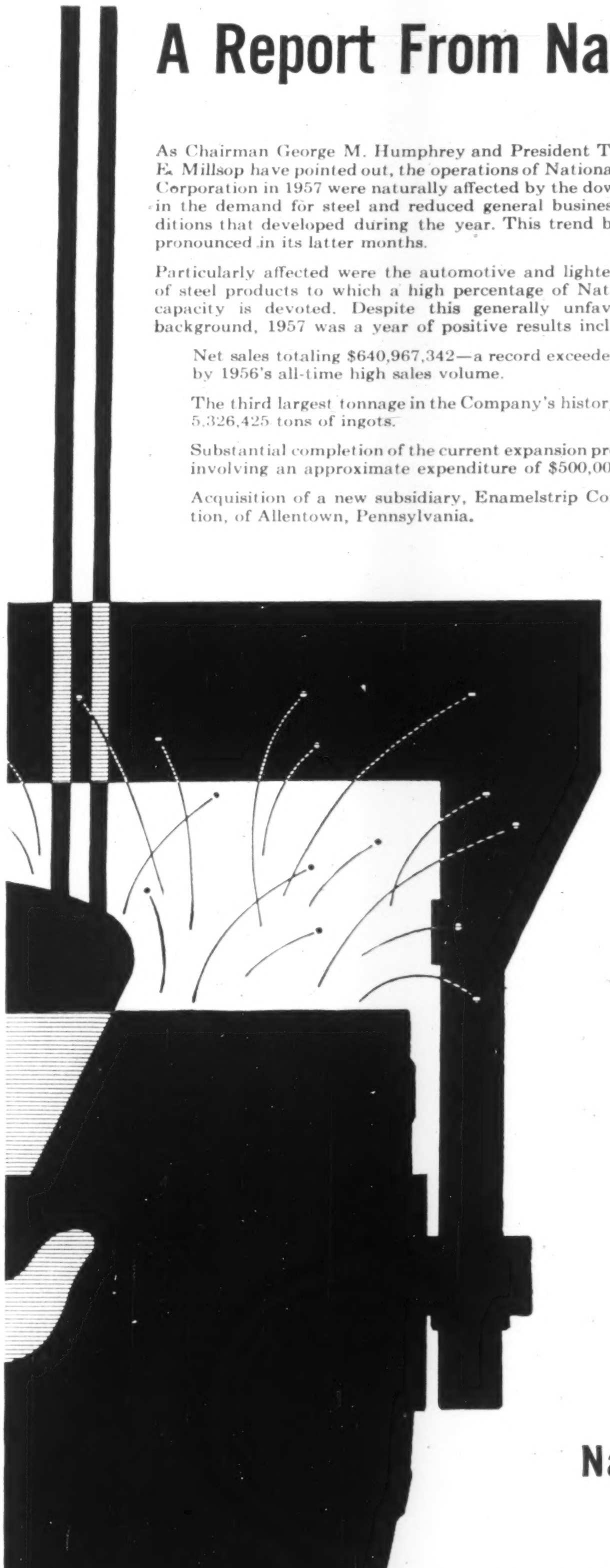
One plant superintendent, now retired, used to grow testy with trainees who asked questions about the plans and prospects of the company. "Do your job right," he'd growl, "and the company will take care of itself." In his day, management may have got away with such tactics. Today it is considered natural and desirable for the recruit to think of the future.

"Why is my boss so afraid to give me a pat on the back?" a trainee asked. This seems to be a common complaint throughout industry.

Why *is* the boss so afraid of a pat on the back? "If the man's doing well, he knows it himself," one supervisor said. But a beginner doesn't know for sure. And even if he suspects he's on the right track, he'll travel faster and farther with confirmation from his supervisor.

A plant superintendent says he's afraid to "spoil" subordinates with too much praise. This is a fallacy. Phony

A Report From National Steel Corporation



As Chairman George M. Humphrey and President Thomas E. Millsop have pointed out, the operations of National Steel Corporation in 1957 were naturally affected by the downturn in the demand for steel and reduced general business conditions that developed during the year. This trend became pronounced in its latter months.

Particularly affected were the automotive and lighter lines of steel products to which a high percentage of National's capacity is devoted. Despite this generally unfavorable background, 1957 was a year of positive results including:

Net sales totaling $640,967,342—a record exceeded only by 1956's all-time high sales volume.

The third largest tonnage in the Company's history with 5,326,425 tons of ingots.

Substantial completion of the current expansion program involving an approximate expenditure of $500,000,000.

Acquisition of a new subsidiary, Enamelstrip Corporation, of Allentown, Pennsylvania.

INCOME AND DIVIDENDS

Net income after taxes and other charges in 1957 totaled $45,518,884, equal to $6.13 per share of capital stock. Dividends of $4.00 per share were paid. Total dividends amounted to $29,667,767 and $15,851,117 was retained in the business.

Total disbursement for wages, salaries and employee benefits increased to an all-time high of $198,589,029. The average number of employees in 1957 was 27,444.

The federal, state and local tax bill was $56,045,963 with taxes continuing to exceed net earnings by a wide margin.

There was an increase in the depreciation, depletion and amortization provision to $46,266,264 from the preceding year's $45,344,338.

BUILDING PROGRAM

The current phase of National's expansion and improvement program, started in 1952, has embraced all branches of the business from raw materials to finished products and is now substantially completed. A large part of the huge cost has been paid from funds generated within the business. These funds were supplemented by financing by additional bonds issued in the amounts of $15,000,000 in 1952 and $55,000,000 in 1956. It is anticipated that no further long-term financing will be required in order to complete the program.

As a result of this great project, Mr. Humphrey and Mr. Millsop said:

"Our facilities have been raised to the highest level of efficiency in the history of our Company. When demand for steel increases we are now ready to fully utilize our enlarged steel making capacity with standards of quality and cost which are unsurpassed by anything in the steel industry."

Promising continued emphasis on National's two most important lines, namely tin plate and allied products and all kinds of flat rolled steel used by the automotive and a great many general appliance and construction businesses, Mr. Humphrey and Mr. Millsop said:

"We believe in the continued growing public demand for the products we and our customers make and in the vital and growing part in the future which they will play in American life. We will continue to devote our efforts to excel in the production and quality of these products."

1957: A SUMMARY

	1957	1956
Net sales	$640,967,342	$664,251,090
Net earnings	45,518,884	52,502,422
Net earnings per share	6.13	7.09
Total employment costs	198,589,029	194,604,451
Total dividends paid	29,667,767	29,568,645

National Steel Corporation

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Owning and Operating

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National Mines Corporation • National Steel Products Company
Enamelstrip Corporation

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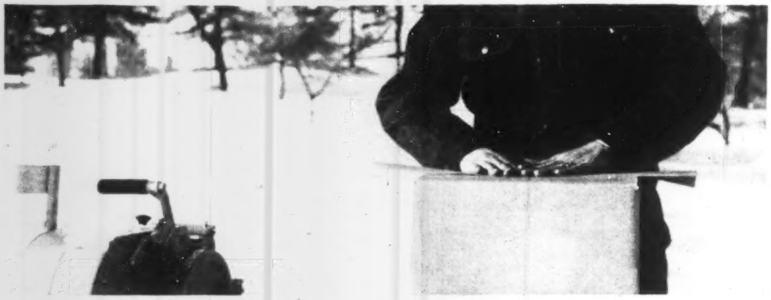

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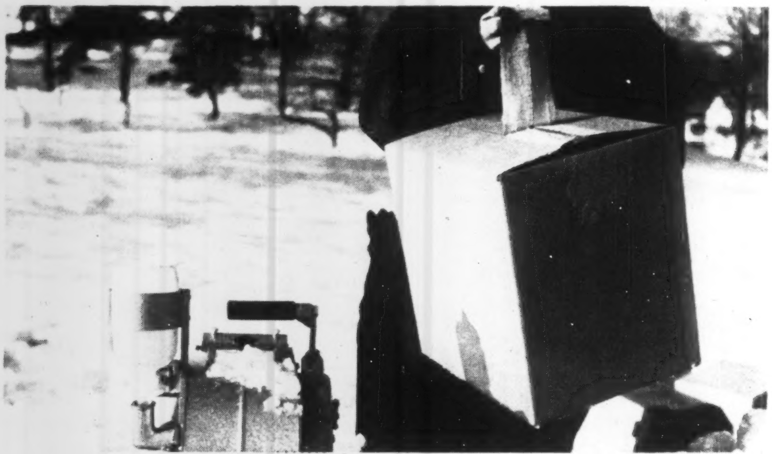

*Official reading — New York, February 18, 1958

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praise backfires, because the recipient senses its insincerity. But few of us ever outgrow the need for sincere praise. Sometimes I suspect that the higher a man's rank, the more he needs it.

Some supervisors seem to fear that their own reputations will suffer by comparison if they give due credit to their subordinates. Such men do not properly understand either human nature or their own jobs. When a man becomes a manager he is no longer judged by his individual performance, but rather by the performance he can inspire in his subordinates. A competitive or jealous attitude can affect the team's record and therefore hurt his own record as a manager.

Some executives will praise a man only when they are handing him a pay raise. My first two bosses were like that. They seemed to think that any appreciation unaccompanied by cash would inflate my ego so tremendously that I would float right over the company fence.

The contrary is true, of course. Praise shows a man that he's getting somewhere, that his prospects are good, and that is exactly what he wants to know. One of the most common reasons for trainees to quit is the feeling that they're getting nowhere, that they're doing poorly (some are!), or that their bosses don't notice what they have accomplished. Feeling "unknown and unnoticed" can be harrowing.

We Don't Neglect Them

The second year, when the formal apprenticeship has usually been completed and the trainee is working in his first position of authority and responsibility, is a particularly critical period. During this time the recruit has left behind him the excitement of learning a new job every few weeks. He's now doing the same work day after day, and at times he worries over whether he's been forgotten or shelved. Even if he's doing extremely well at, say, the foreman level, he may fear that he's so useful at this level that he will be kept on it.

Now as never before the new man needs the *personal interest* of his immediate supervisor—and of men higher in management as well. Now is the time to watch his progress, to take him into the company's plans, and to give him an idea of his prospects.

There is no substitute for a deep personal interest in the recruit. This doesn't mean that he's a "fair-haired boy" who doesn't have to earn his advancement. It does mean that while he's relatively

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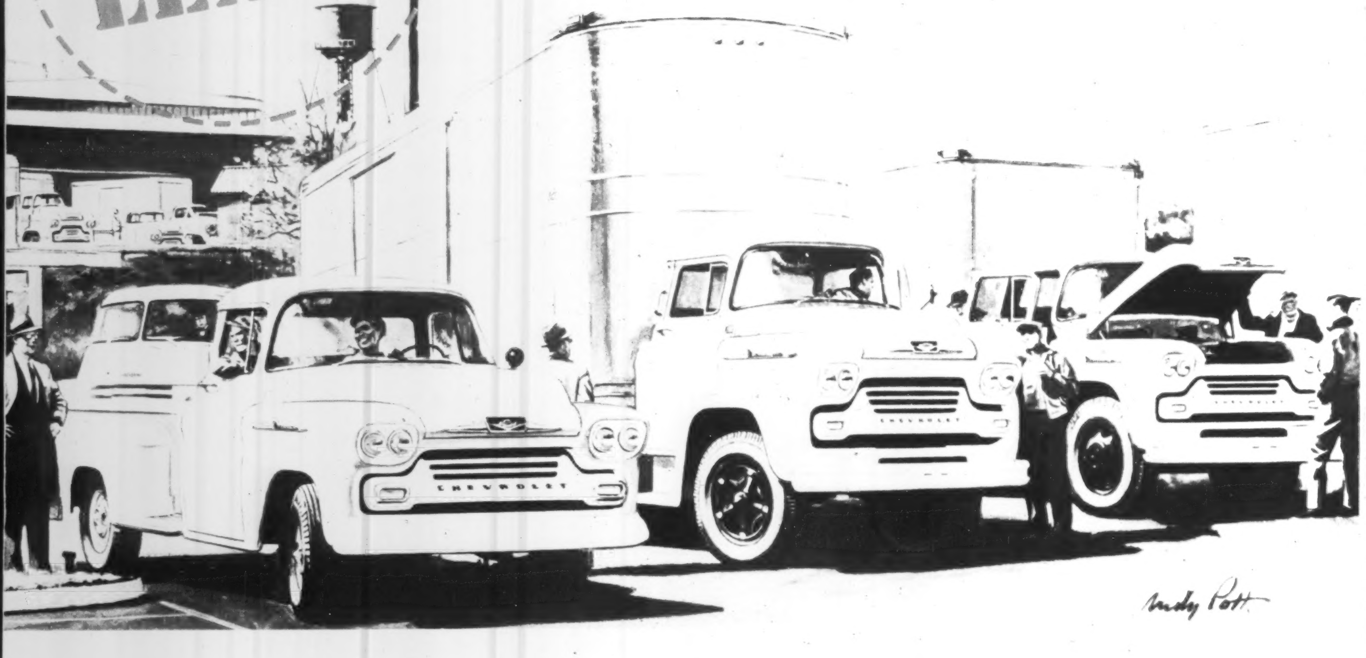

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new to the business, new to industry, and often far from friends and family, he needs whatever friendly guidance the boss can give him.

If, for example, the trainee begins to think at this point that he may have chosen the wrong field, that he would be happier in research, sales, or administration, he should feel free to discuss the matter with senior men who can help him change if it is really desirable.

Personal interest extends also to the recruit's wife. She too may feel uncertain of the future, and she's far more likely than her husband to feel isolated in a new location. One way to show interest is to invite the husband and wife over for a social evening, to help them make contacts in the community.

Is It Worth the Effort?

Some 30 years ago I was daring enough to recruit three engineering college seniors for American Brake Shoe. I felt elated, but the company president was worried. "Bill," he asked, "have we done the right thing? Will there be enough opportunities for all three?"

Within these 30 years the company's annual sales have increased from $30 million to $186 million. All three recruits became vice presidents. We could have used many more.

Last year we recruited 22 men. Again, we have room for all these and more. Despite many mistakes, the apprenticeship program has been successful. Most recruits attain at least the level of plant superintendent—no mean responsibility—and many have become divisional vice presidents and presidents. Nearly all our top men today came to ABS as trainees.

The job wasn't always easy, but it was worthwhile, it was stimulating, and it paid off in the continued expansion, diversification, and vitality of the company.

Now these men in turn are recruiting, selecting, and training a new generation of executives. It's tough, time-consuming work for men who have many other pressing duties. But in the long run, this contribution may rank as the most satisfying and the most important. For the future of an enterprise depends on how successful today's managers are in selecting and developing the team that will run the company tomorrow.

What in business can buy more happiness than knowing that at least some few count your interest in them as a contribution to their progress? END

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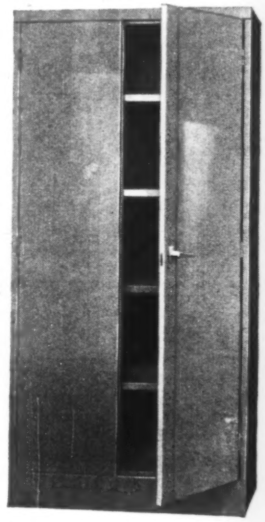
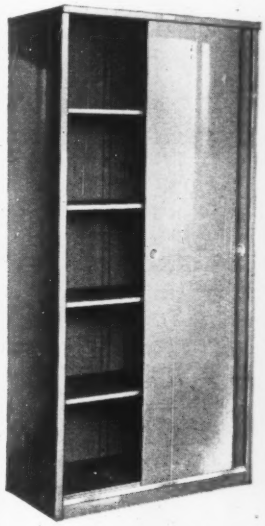


SWING-DOOR

3 standard models — supply, combination, wardrobe — all 78″ high. Safe-like swinging doors — single handle control.



SLIDE-DOOR

3 standard heights — 29″, 42″, 78″. Sliding shelves adjustable without bolting. Doors can be removed in a jiffy.

The next time you visit your office supply dealer, ask to see the Borroughs line of swing-door and slide-door cabinets. The conversion feature of interchangeable doors on Borroughs slide-door cabinets is most intriguing. You may select steel, glass or Borite doors for the 29″ and 42″ models. The 78″ model illustrated is a steel door unit. The swing-door models also have outstanding features that you will appreciate. Your eyes and good sense of value will convince you that Borroughs Products are leaders in their field. Choice of 4 modern, electrostatic baked-on enamel finishes — Spring Green, Dark Green, Gray, Fall Tan — in all Borroughs office furniture.

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In Dallas, 9 out of 10 presidents had actively influenced a major company purchase during the month preceding the survey. But in less than 6 out of 10 of these instances had the president seen a salesman representing the product or service bought.

In Cleveland, 8 out of 10 presidents had influenced a major purchase... yet *fewer* than half of these had seen a salesman.

In Syracuse, 2 out of 3 presidents had had this purchasing influence... yet again fewer than half had seen a salesman.

This situation points up a serious marketing problem – and underscores the NECESSITY of advertising in management magazines.

Presidents are serious readers of business magazines. And they accept in particular, Dun's Review and Modern Industry, the magazine edited to the special interests of presidents – and men who are going to be. 79% of DR&MI's readers hold a title of General Manager or higher. Over 52,000 are presidents.

When a president decides to buy, it's a sale – and presidents buy by the carload, not by the dozen; in tons, not pounds. If *you* want to reach the men with the authority to initiate and OK big buying, choose the pages of Dun's Review and Modern Industry.

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The Magazine of Presidents – and men who are going to be.

*Research carried out by Fact Finders Associates, Inc., New York

MEET TOMORROW'S BIGGER-SPENDING CUSTOMERS

A new study indicates that the average family will have from $7,000 to $8,000 to spend in 1975—barring war or depression.

BY THE YEAR 2000, it has been predicted, the average family will have an income equivalent to $25,000 a year at current prices. That may well be true, but the fact isn't much help in company planning today. Forty-two years hence is well beyond the range of what is optimistically called "the foreseeable future." Products available then may make some of today's most promising developments obsolete.

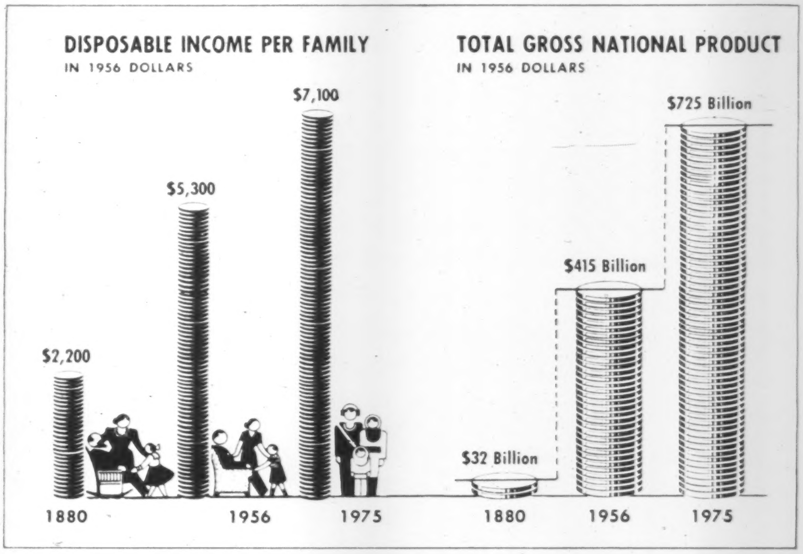
Some companies do, however, plan quite realistically as far ahead as twenty years. To this group and others who project even ten or fifteen years in the future, some more modest predictions just issued by the Committee for Economic Development are likely to be both interesting and useful. The Committee, be it noted, does not make predictions merely to astonish the man in the street. It is a business-supported group that sponsors economic studies designed to be of help in shaping business and Government policy.

If economic affairs are conducted with reasonable intelligence and no hot wars break out, the Committee's economists predict that by 1975 the average American family will have an income of $7,100 in terms of today's prices and after taxes, as against $5,300 today. The researchers also find it quite possible that average family income after taxes will go as high as $8,500.

What Will They Buy?

What will consumers do with their increased income? Will they save a lot more than they do today, and reduce the proportion spent on food? That's what classic economic theory says should happen as incomes rise. Some increase in saving may take place, but there is reason to believe it won't cut severely into potential spending.

The most elaborate study yet of consumption patterns is one made by Dr. Irwin Friend of the Wharton School of Finance and Commerce, University of Pennsylvania. It was prepared from data gathered by the Bureau of Labor Statistics in 1950 when it revised its Consumer Price Index. Dr. Friend's study indicates that while the percentage saved rises with income, the savings are very small until family take-home reaches $7,500. And even if the average 1975 family does save the 11 per cent that families with more than $7,500 but less than $10,000 saved in 1950, it will still be spending over $6,000 a year.



As for food, consumers are actually spending a larger percentage of their incomes on it today than they were in the depression year of 1932: 24.6 per cent as against 23.4 per cent. There's a limit, of course, to the amount a family can eat, no matter what its income, but it can always buy more expensive foods—more meat and fewer starches, more packaged foods, and more restaurant meals. As their incomes have risen, that, apparently, is just what consumers have been doing.

Expenditures for clothing, on the other hand, have been steadily losing ground—not, of course, in absolute dollar amounts, but as a percentage of all expenditures.

It would be a mistake, however, to conclude that the trends of the last twenty years will necessarily continue over the next twenty. White-collar workers tend to spend proportionately more for clothing and less for food than blue-collar workers, and the proportion of white-collar workers is on the rise and may increase more steeply in the future. The only thing certain: if the prediction works out, there will be larger dollar volume for everybody.

What does this mean to the company planner? By and large it means that his long-term planning should be for expansion, even though cyclical fluctuations may affect his short-term strategy.

As to the direction expansion should take, the planner should study, not how the average family spends its income today, but how those with $6,000 to $8,000 after taxes dispose of their money. More and more people will be getting into this bracket as time goes on.

There are, of course, the two big "ifs" in the picture: *if* we conduct our economic affairs with intelligence and *if* there is no all-out war.

"Growth requires a high degree of flexibility and mobility of both men and capital," the CED report states. "But something comparable to hardening of the arteries in an individual can occur in an advancing society, such as ours. Some [groups] can put up strong and successful resistance to changes that would be beneficial to the entire society."

Among the threats to flexibility, the Committee lists higher tariffs or import quotas, labor union demands for shorter hours at the same pay or resistance to technological change, and monopolistic practices by industry. Most damaging of all, the Committee believes, would be Government control of wages and prices. Increasing taxation of either individuals or business, it adds, would also impede future growth.

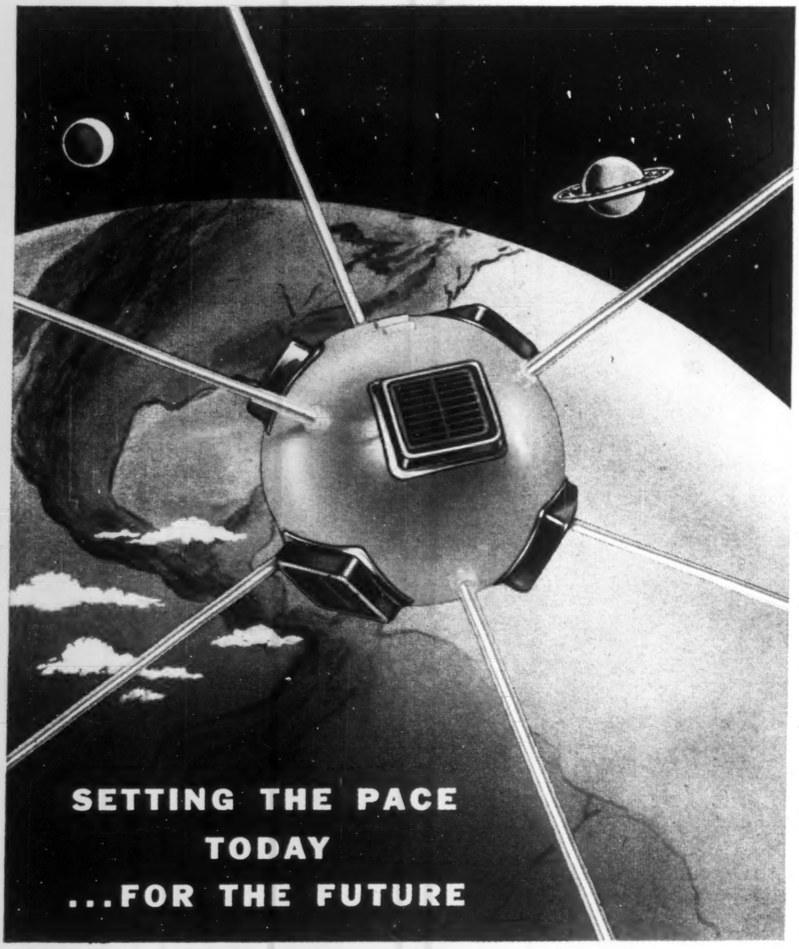
USA vs. USSR

About the significance of developments on the international scene, there is some disagreement among the men who served on the research and policy committee for the report.

Figures cited show that U.S. real gross national product grew at a rate of 4 per cent per annum from 1950 to 1955, whereas the USSR's rate was 7 per cent, although from a lower base. Also a large share of Russian production was devoted to military purposes. Says the report: "The ultimate objective of economic growth is to raise the living standards of human beings. . . . Growth should be appraised primarily and finally by that criterion."

With this, William Benton (chairman of the board, Encyclopaedia Britannica), economist Beardsley Ruml, and Fred Lazarus, Jr. (chairman of the board, Federated Department Stores), strongly disagree: "National survival is even more 'primary' than living standards. . . . For 40 years the U.S. has maintained its long lead over the USSR in living standards. Yet communism has continually gained ground internationally, and these gains are rapidly accelerating. We Americans need to be aroused from our complacency."

—Alice Smith



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COST CUTTING

continued from page 40

the big companies represented on the Presidents' Panel (see page 29) are confidently adopting the same policy in their planning today.

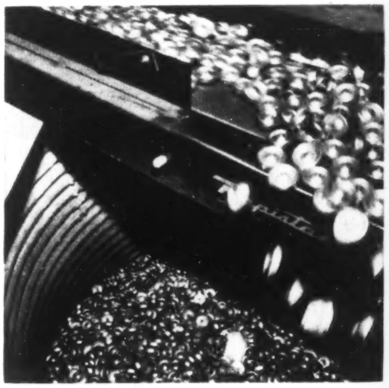
Despite the distress the present recession is causing, it may in some respects prove to have its compensations if the special and intensified cost-cutting programs instituted now continue to pay off handsomely in the future.

Many companies will emerge with a more productive plant; others with a lower break-even point. A lot of executives will have learned the wisdom of making plans to combat a recession when times are good rather than after the downturn hits.

Top management will doubtless have a new standard for evaluating the performance of subordinate production executives. The men who swung into action with well-planned strategies for countering the recession's impact will stand out clearly from those who panicked when the pressure was on.

Struggling to stay in the black, few company presidents can now doubt that the economy has settled back into the classic ebb and flow of prewar days. As Charles M. D. Reed, president of the Taylor-Reed Corp., Glenbrook, Conn., phrases it, "For sixteen years the country has been trying to fill a void of available products or facilities. Now that void has been filled."

Cost-cutting and efficiency-promoting programs started or accelerated today should put your company into better shape for the next boom—and the next recession. END



Despite the need to conserve declining capital, some manufacturers are continuing to modernize their materials-handling systems to get their plants into the best possible shape for the next boom. Here, ball-bearing wheels are shown moving along a conveyor.

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THE PROFIT SQUEEZE

continued from page 31

(49 per cent), automation (27 per cent), tighter budgeting and cost control (17 per cent), higher productivity (11 per cent), and lower marketing costs (another 11 per cent).

"A general tightening up all along the line" is planned by many panelists intent on trimming overhead and eliminating all unnecessary expenses. Many presidents hope to cut costs through "better sales forecasting and production planning," "elimination of products with low-profit margin," "upgrading management personnel," "standardization of product," "increased inventory turnover," and "more effective use of the research dollar and the promotion dollar, efficiencies through volume increases."

One president sums up the multiple profit-strengthening factors in this way: "More efficient processes, including increased degree of automation; less overhead in proportion to greater sales volume; larger proportion of specialties in product mix; increased expenses for technical and market development; and broadened understanding of corporate objectives through improved communications, and thereby better cooperative effectiveness on part of personnel."

Any Outside Help?

What can be expected of Washington?

According to 36 per cent of the Panel, more defense spending promises to be the biggest Governmental prop to business's profit position in the next few years. But while many panelists say "defense spending will stimulate the economy," others who agree with this viewpoint add, "Generally speaking, we cannot lean on government. We must hoe our own row."

Slightly more than a third of the panelists expect lower taxes to aid their companies' profit picture. Some—12 per cent of the men—are hoping for higher tariffs. But this is more of a hope than an expectation. As one president says, "We need higher tariffs, but I doubt if we will get any consideration." Even those men who are counting on some help from more defense spending doubt whether they will get "much relief. Those of us in military business badly need increased profit margins for investment in research and engineering."

Some men look for profit help from easier credit, lower price supports, less regulation, more public works spending. But far more men—21 per cent of the

Panel—expect no help from the Government at all on improving their companies' profit position. A good number of them, in fact, would prefer a hands-off policy. Says one president, "I foresee no activity of Government that will be helpful to the economy of the nation—rather, there is likely to be continued profligacy in spending and confiscatory taxation." All that several men ask is "a better climate for consumer buying."

The tenor of the Panel's thoughts about the Government's role in the business profit picture over the next few years is broadly reflected in the views of one man, who says, "There are no Governmental or legislative factors which we foresee as specific aids to our profit position in the next few years. Our profit is geared to the American economy in general. Governmental action which influences the economy will affect our company. Increased defense spending, lower taxes, and sound fiscal policies are examples of action which may be expected to strengthen the national economy."

Improving Profit Margins

As might be expected, company presidents who expect new products, more efficient processes, automation, and cost control to contribute most to profit improvement over the next few years are already focusing management effort on these factors. Along with the development and launching of new products, these presidents are scrutinizing the profitability of present lines, "upgrading" the high-profit items, "streamlining manufacturing," emphasizing "better selectivity of sales outlets," and "driving for increased sales."

Of course, improving the net profit margin, as many presidents point out, "involves all phases of business activities." In itself, the margin cannot be widened exclusively by more efficient machines, abler men, or more scientific methods—although these, as well as other factors, may be characteristic of most strong and healthy industrial companies. The following comments from several panelists summarize in capsule form the steps most Panel companies are now taking to fatten net profits:

- "Accelerating introduction of more profitable new products; curtailing less profitable programs; directing higher proportion of engineering effort to more profitable results."
- "New and improved products to round out lines where we are weak, a determined effort to upgrade current customers, a continuing drive on costs, and

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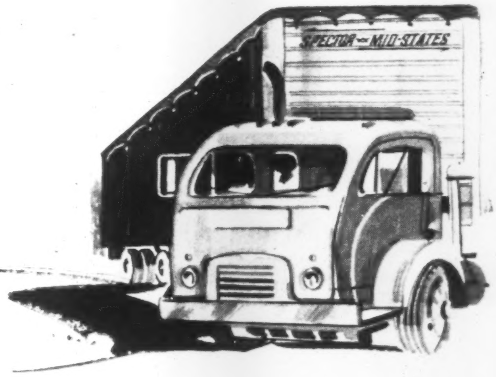

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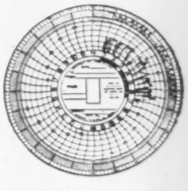

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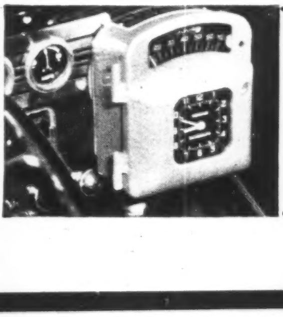

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In fact, special efforts to cut costs are reported by all Panel companies but one, whose president declares, "this effort is constant."

To cut costs, some companies are taking measures as extreme as "curtailing hourly workers, deferring merit increases, and reviewing essentiality of salaried jobs." Others mention "crash" programs of "thoroughly reviewing our direct and overhead costs and budgets." Many presidents, besides eliminating

WILL THE RECESSION EASE UNION DEMANDS?

Most presidents on the Panel think that union demands may soften slightly at the bargaining table this year, but their real hope is for more conservative settlements. Many say that what happens in the auto and steel industries will affect their own bargaining significantly, but only a few presidents anticipate strikes. Here are some comments:

Union demands will ease. . say 58%

"In our industry, lower demand for wages; no retreat of significance on principles."

"Already has softened union firmness at bargaining table."

"*Some* softening of demands; stiffer resistance by management."

"We expect to have a slightly easier time of it at the bargaining table in 1958 in our smaller divisions and plants, and settle for less than in 1957 or 1956. However, in our larger units, we expect to face union demands at least equal to the automatic and cost-of-living increases of the current steel contracts."

Little or no effect on demands . . . . say 20%

"As of this date, labor demands are as great, if not greater, than in any previous negotiations."

"Probably soften demands a little, but not much. Can only have real effect if autos and steel stiffen."

"Greater emphasis on income stability devices; less on wages."

"None, except to increase labor's effort to get shorter workweek at same pay."

"No broad effect, since built-in wage increases are usual in basic industries' long-term contracts and other labor will insist on catching up; since Congress will not yet challenge inflationary effects of wage increases; since Washington recognizes inflation proportionately reduces impact of national debt incurred during war years; and since no one company and no one industry can effectively stem the trend."

No effect on demands, some effect on settlements . . . . say 13%

"Won't keep them from asking."

"Demands won't be softened much, but there should be a lot of stiff backs and hard noses on the management side of the bargaining table."

"No effect on labor demands, but a possibility that settlements will be at a lower level than last year. The auto industry will set the pattern for the rest of us."

Strikes: Fewer . . . . say 4%
Some . . . . say 2%
More . . . . say 3%

"Business will not give in to union demands as quickly, and unions will not be as willing to take a strike as in the past."

"Some strikes—not serious. This should be the year to 'freeze.' "

"Speaking generally, and not with reference to my own company, the current economic situation should probably soften labor demands somewhat, but because of reduced business ability to pay labor, strikes may increase this year."

luxuries and frills, are seriously asking, "What 'necessities' can we do without?" Other companies are "weeding out" and "eliminating marginal people, products, and plants." Administrative and overhead costs are also being keenly scrutinized.

From Peter to Paul

Budgets are being reallocated to provide more money for some phases of the operations and drastically less for others. Emphasis is on making the investment dollar yield a maximum return—an objective, of course, as old as business itself, but more crucial as some company presidents see net profits slipping toward—or, in some cases, below—the rate the investment dollar could earn elsewhere without nearly so much management application, anxiety, and aspirin.

Panel presidents are, in most cases, reslicing their present budgets—or actually putting more money into several phases of their operations simultaneously. For example, more than half the Panel companies—exactly 53 per cent in both cases—are spending more on selling effort and research in 1958. In comparison, only 1 per cent of the companies are trimming sales expense, and only 4 per cent are cutting research.

More money is being put into plant equipment this year by 29 per cent of the companies, against 16 per cent that are cutting back. Some panelists who are spending less, however, say they are willing to invest in "new equipment which will pay for itself in two years or less." Data-processing equipment will get more money this year from 21 per cent.

More spending this year is slated for product development (13 per cent of the Panel), engineering (7 per cent), marketing (4 per cent), and plant expansion (3 per cent). Urgency and need seem to determine when and where money will be spent. For example, one of the few companies expanding plant reports, "We are building two new plants—the first new construction in 30 years."

Advertising is getting more dollars this year in 9 per cent of the companies. But the same number of companies plan to cut advertising expenditures. These cuts are apparently not across-the-board, however. Several companies, reporting more selective advertising outlays, say they are reducing specifically only plant equipment advertising, institutional advertising, or "exhibits and some advertising."

More money is being spent this year by some companies on employee train-

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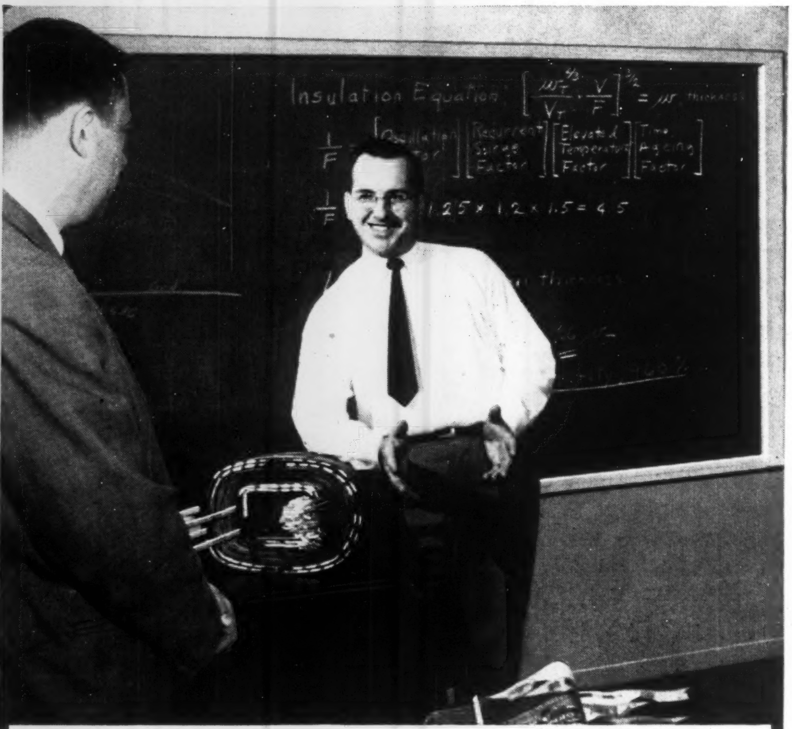

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ing, quality control, streamlining the organization, and, in the case of one consumer-goods producer, "styling and dealer service." In companies that are not increasing budgets for any particular phase of their operations (11 per cent say they plan to hold to 1957 levels), budget levels may be relatively high.

Similarly, 23 per cent of the Panel are not cutting budgets on any operational phase, but are "increasing efficiency" at present expenditure levels. Less money is going for plant expansion this year in 10 per cent of the Panel companies and 7 per cent are cutting back capital expenditures "for added capacity," "for manufacturing and development," and "of every nature." Also curtailed this year, by some companies, will be "inventory, payroll, overhead," "long-range projects that are too hazy," "recruiting efforts among others," and "direct and indirect labor and clerical expense; entertainment; and habit and fringe costs not carrying weight on close examination."

But the biggest budget cuts—reported by 39 per cent of the Panel—add up to an all-out assault on controllable costs: frills and unessentials, overhead, operating expense, and administrative expense, "where ways can be found."

Will Training Programs Suffer?

Replies from the Panelists indicate that top management is not letting current recession-motivated cost cutting interfere much with training programs, although there is less recruitment—and more applicants to choose from.

Six out of ten presidents state flatly that their recruitment and development programs are untouched by the recession. One typical panelist says, "We have not cut down on our training and development costs at all—but we will have somewhat fewer openings than usual to fill this year." Some men report that, despite more applicants for their programs "than for the past four or five years, many applicants seem to be marginal in ability." In a word, management can be choosier about the men it hires.

Two out of ten panelists note little change in their programs due to the recession. One out of ten reports some slowing down of executive training and recruitment programs, but only one company has "temporarily suspended the program as a frill."

In all phases of their operation, say the presidents, the trick—and management's top responsibility—is to "balance short- and long-range goals," "do more for less," and "work like hell!" END

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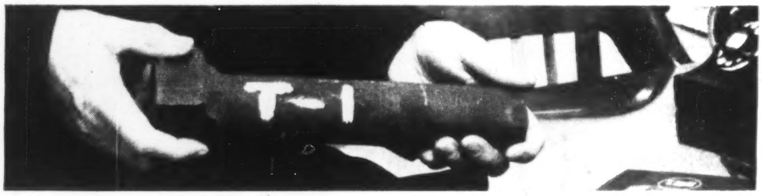

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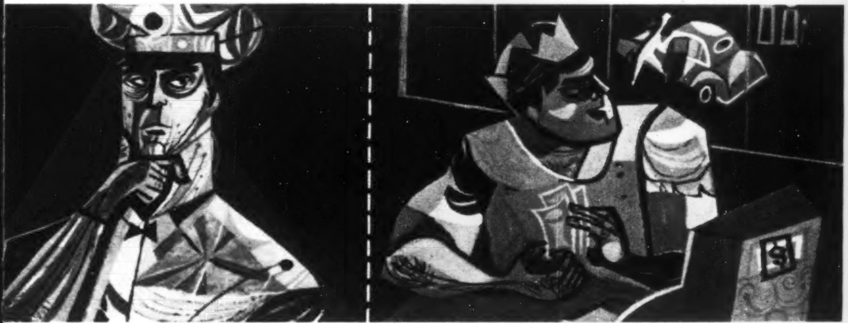

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IN TODAY'S tight-selling period, companies are taking unusual steps to help their customers bolster sales. For instance, Dow Chemical Company of Midland, Mich., is applying motivation research to help its customers sell.

Usually applied to consumers (DR&MI, July 1954, page 30), motivation research has been used to dig out their subconscious feelings about various products. Now the technique of interviews-in-depth has been extended by Dow to gas station dealers, both employees and lessees, to plumb their real feelings about their jobs, their customers, and the oil companies.

Although none of its products are sold in gas stations under the Dow name, Dow does produce an antifreeze solution that is sold under the labels of various oil companies through their individual service stations.

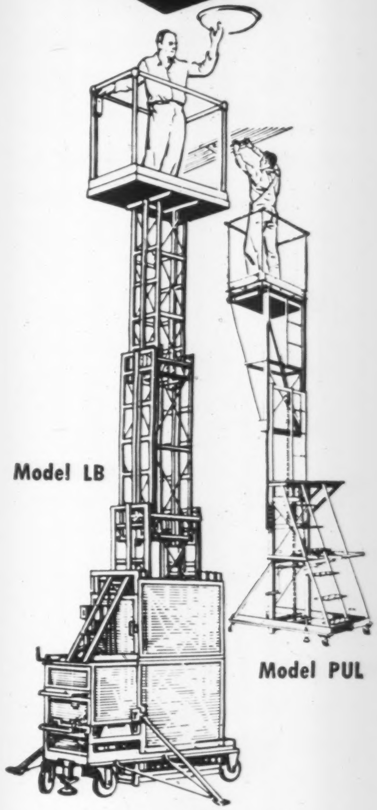
The study, which was conducted by Social Attitudes, Inc., New York, did not limit itself to the dealers' methods of selling antifreeze. Instead, it probed the dealers' psyches to come up with a sound rationale for spurring them to rack up bigger sales.

Psychologist Percy Black conducted the study, which was based on lengthy interviews with dealers across the country. He uncovered rationalizations for many dealer actions that hinder sales. For instance, he explains that dealers are often reluctant to recommend specific brands for fear customers will think they are being taken advantage of. Dr. Black points out that a dealer is frequently torn between his own image of himself and the way he fears he may appear to the buying public.

Says Dr. Black: "Dealership today is gradually evolving into a self-respecting and community-respected status. The dealer's ideal is to be regarded as a combination of small business man and mechanic. Many years ago the public's confidence was shaken by the unscrupulous tactics of some dealers. This memory, though fading, still lurks and disturbs the dealer - customer relationship. The dealer is on trial."

Another company, Lumber Fabricators, Inc., Fort Payne, Ala., recently used motivation research to help it pick a name for its line of prefabricated houses. By interviewing hundreds of consumers and using such projective techniques as free-word association, 450 names were winnowed down to the winner. "Crest Homes" was knocked off the list when interviewees said that the houses were probably near the seashore.

90% of overhead servicing can be done faster and safer with these ECONOMY Hi-Reach Telescopers!



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"Hillcrest Homes" was dropped because it made people think of an apartment house. Finally the company discovered that the most suitable connotations and the fewest negative associations came to mind when a person heard the name "Kingsberry Homes."

Motivation research is being used by another company to put the carpet sweeper on the comeback trail. The E. R. Wagner Company of Milwaukee, Wis., asked Dr. Ernest Dichter, president of the Institute for Motivation Research, to probe the American housewives' hidden feelings about the carpet cleaner. The object was to get back some of the market lost to the vacuum cleaner in recent decades.

After interviews with hundreds of housewives, Dr. Dichter predicted that the carpet cleaner would recover if producers made an effort to angle their merchandising and advertising approaches toward the satisfaction of certain "hidden needs" of the housewife. Among these needs Dr. Dichter stresses:

- **Permissiveness** — the freedom of the housewife to do what she wants, when and how she chooses.
- **Family participation**—the satisfaction of getting others in the family to join her in taking care of the house.
- **Individual participation**—desiring to be part of the housecleaning operation in an active way rather than as a "button-pusher."

Dr. Dichter points out that above and beyond product performance, these and other needs must be satisfied if the cleaners are to be successfully sold. And he urges carpet-cleaner producers to picture the sweeper as the homemaking tool of young suburban families, to overcome the present association of the product with older women, spinsters, and life on the farm.

Brain-children at work

Nothing is so irresistible as an idea whose time has come. And management knows that now, more than at any time during the past decade, new ideas are needed.

To generate profit-producing ideas, companies are setting up formal new-product departments, and brainstorming is spreading like a heat rash. Purchasing agents have long known that one of the most fruitful sources of ideas is the troop of salesmen they

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see every day. Good salesmen are usually well-equipped with profit-producing ideas, but these are generally confined to new uses for products the salesmen handle.

To take advantage of this, one company has set up a program to draw out ideas for new products from suppliers' salesmen. Aerosol Techniques Inc., an aerosol packager, Bridgeport, Conn., sent oversize, simulated theater tickets to present and potential suppliers. When filled in with a description of an idea for a new aerosol product, the ticket was good for one appointment with the purchasing agent.

H. R. Shepherd, president of the company, favored the plan because he believes many good ideas are neglected in the fast pace of modern industry. What have been the results of the program? In addition to several specific usable suggestions for new products, the company is now increasingly thought of as a fast-stepping outfit on the alert for new ideas from any source.

Here are some of the new-product ideas the salesmen came up with to pay for their appointments:

- A coffee fragrance aerosol for stimulating appetites in restaurants.
- An aerosol of mucilage for quick, easy handling.
- Small sample aerosols to merchandise shaving creams in retail stores.

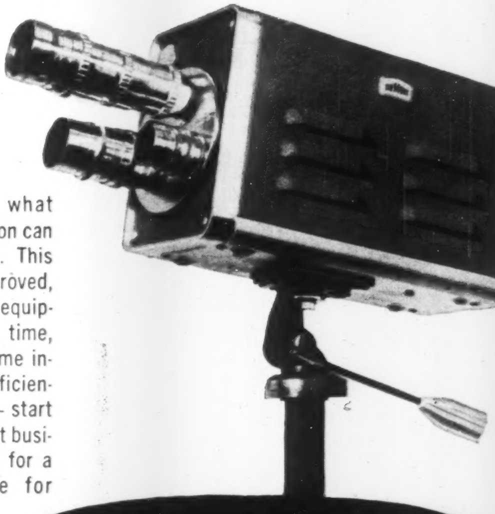
Another company has been getting results in recent months from a fresh, fragrant idea. Angelique & Company of Wilton, Conn., drops its checkbooks into vats of its product which is, fortunately, perfume. The amount absorbed by each checkbook sells for about $40 at retail, and the company uses about 96 checkbooks a year.

But it's well worth the cost, according to Charles Granville, company president, who fathered the idea. "Every check is handled by an estimated 25 people," he points out. "That gives us a lot of mileage."

In addition to increasing public recognition of the product, the perfumed checks bring in dozens of over-the-transom orders each month from bank clerks, secretaries, and others involved in handling checks. "We've actually built up a substantial number of customers in the banking field—just through our checks," Granville declares.

Incidentally, he reports that the company's working capital seems to go a little further lately. Since the

seeing
is believing



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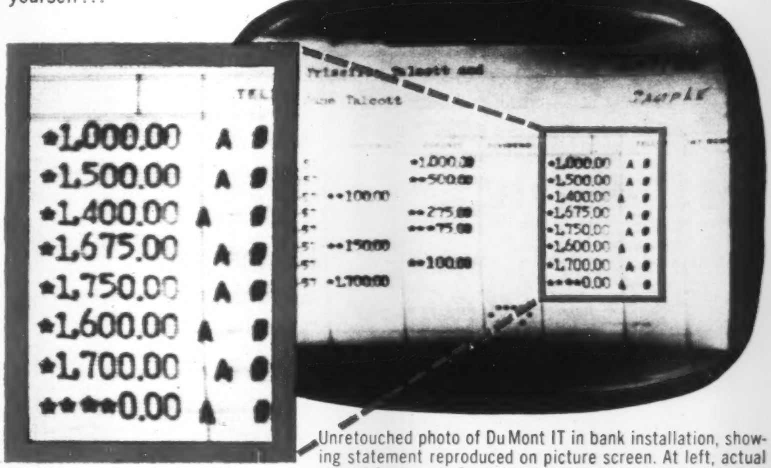

Unretouched photo of Du Mont IT in bank installation, showing statement reproduced on picture screen. At left, actual size of figures on 8" screen.

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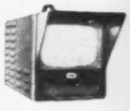

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checks became balmy, check cashers have become rather erratic. Time and again Granville has found that checks were held and not cashed for several weeks. "People just think the checks are too good to cash, and that's all right with me," he says.

New Spurs to Sales

The importance of new ideas is again underscored by the sales performance of Bell & Howell Company, Chicago. This manufacturer of photographic equipment estimates that new products introduced since mid-1956 will account for about 50 per cent of total volume in 1958. And sales so far this year are, according to the company, considerably above last year's.

To keep this volume high, the company is searching for new ideas in selling techniques. This is being done through an unusual contest with prizes of 450 shares (worth about $25,000) of B&H stock for the salesmen of the company's retail dealers throughout the country.

For each Bell & Howell product he sells, a salesman may send in an entry telling what he said or did that made the customer buy. And there will be 207 winners in all, with the top prize amounting to twenty shares of stock. To spur the sales clerks to read thoroughly a B&H booklet on how to sell, the company will ask each one who submits an entry a question from the booklet. A correct answer doubles the prize won.

The entries will be judged on the freshness of the sales methods described as well as on the style in which the salesman describes his particular approach.

Manufacturers frequently bewail the lethargy of retail sales clerks. Perhaps this approach of awarding company stock is one way to induce the clerks to identify their individual interests to some degree with the company's goal of stepped-up sales.

So that the company's own salesmen won't feel left out and will put their best efforts into the promotion, another contest will be held for them, based on their volume performance. Three winners from among the company's 50 salesmen will fly off (with their wives) to Las Vegas for a week's worry-free vacation. For, as part of the prize, the winner's territory will be covered for him by either the marketing vice president or another sales executive.

—T.K.

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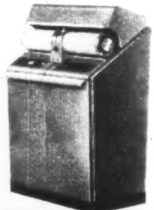

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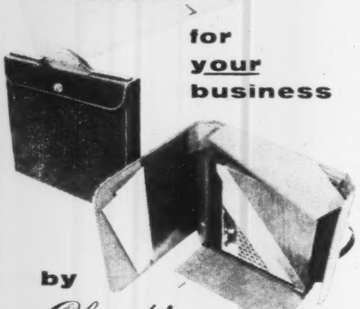

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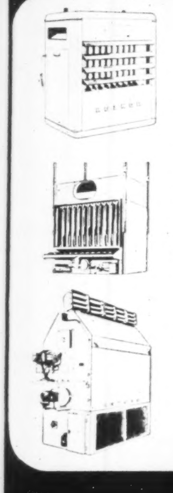

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REZNOR
WORLD'S LARGEST-SELLING DIRECT-FIRED UNIT HEATERS
Reznor Mfg. Co., 80 Union St., Mercer, Pa.

SHOPPING CENTERS

continued from Page 37

are so important to the chains that they have been driven to spirited competition for the better store sites.

For instance, a year or two ago, the Thom McAn shoe chain went to the length of distributing a large, full-color brochure among shopping-center managements. The brochure aimed to prove that a Thom McAn store in a choice spot would generate extra traffic for a center.

Yet, in the years immediately following the close of World War II, merchants in the big-city downtown districts gave scant thought to the possibility of a suburban threat. As a happily de-rationed citizenry bought, bought, and bought some more, the downtown stores were too busy tending their cash registers. Then, one day, they looked up and discovered they weren't selling so much as they ought. They took another look and saw what appeared to be their business going to stores in the suburbs, and particularly to stores in those new shopping centers.

A study of 48 metropolitan areas by the Commerce Department's Office of Area Development tells the tale. Between 1948 and 1954, total average dollar volume in the big-city downtowns rose only 1.6 per cent. (Taking into account the inflation that came with the Korean war, that figure probably represents an actual decline in unit sales.) At the same time, average dollar volume in the standard metropolitan areas—the central cities plus their suburbs—rose a spanking 32.3 per cent.

Trouble Downtown

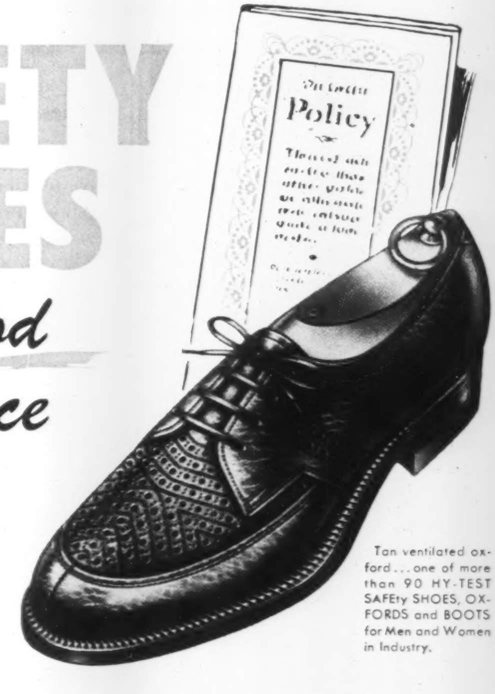
Taking it on the chin hardest were Detroit, Pittsburgh, and St. Louis. Detroit's dollar volume dipped more than 11 per cent—this while the region as a whole gained almost 40 per cent. Similarly, Pittsburgh's downtown dived 16 per cent even as sales in the Pittsburgh metropolitan area climbed 15 per cent. Downtown St. Louis lost over 10 per cent of its trade, but sales in the greater St. Louis area went up 33 per cent. Other downtown city areas, though less battered, had nothing to crow about. On the average, their share of total trade in their regions declined about 5 per cent between 1948 and 1954.

If these figures seemed pretty drastic, the worst was yet to come. For the real push in shopping-center construction did not begin until after 1954.

The impact of this new competition

SAFETY SHOES

are Good Insurance



As long as there is a Law of Gravity, there will be falling objects. Just as certain is the fact that the toes of men have a way of sticking out as obliging targets for these objects. One of ten industrial accidents involve injuries to feet and toes.

Tan ventilated oxford . . . one of more than 90 HY-TEST SAFEty SHOES, OXFORDS and BOOTS for Men and Women in Industry.

Today, more and more workers insure themselves against these hazards by wearing HY-TEST SAFEty SHOES. This "policy" protects them against loss of income and painful suffering. It protects their companies, too, against loss of production and unnecessary added costs. And the "premium" for such protection is low, indeed . . . no more than the cost of a pair of good-quality ordinary shoes.

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was probably more painful to percentage-renting realtors than it was to the large urban retailers. After all, it was the city merchant's branch or chain stores that were tenanting the new shopping centers.

Downtown store managers of one chain, disturbed by trade lost to company stores in the centers, asked their superiors what the point of it all was. They were told that even though the downtown stores were losing business to their own new shopping center stores, this business was bound to be lost to somebody in the suburbs. Better it should be lost to themselves than to strangers. Large downtown operators also felt that with main store and branch store, their total business was gaining.

THE AUTHOR • Art Zuckerman has been writing for the business press for the past seven years, in addition to contributing to various consumer magazines. At present he is associated with Fairchild Publications as an editor of *Footwear News*. He has also served as merchandising editor of *Drug Topics*. Mr. Zuckerman is a graduate of New York University's Washington Square College of Arts and Science.

Nevertheless, they certainly weren't happy about the situation downtown. After all, they had capital investments to protect. Besides, many downtown stores weren't represented in the suburbs. For them, protecting the traditional shopping district was a matter of survival.

Something had to be done, and so downtown associations were organized to figure out what and how.

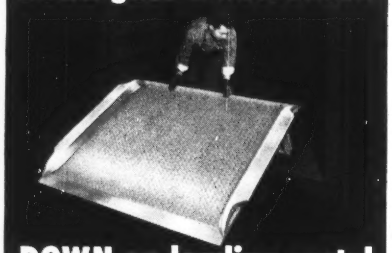
Casing the Competition

Let's take a look at these new shopping-center monsters the downtowners are up against. Actually, they vary quite widely in basic characteristics. But fundamentally there are three types.

The convenience or neighborhood center serves pretty much the same function as that clutch of little stores around the corner and a few blocks down. It takes care of day-to-day needs. The community center can be compared to a small town's main street or to a lesser shopping district in a large city.

The regional center is the real powerhouse. It attempts to provide the same coverage as downtown Big Town itself. The regional is therefore worth a closer look. Physically it provides an environment tailored to pedestrians. It is usually built around a mall—a "main

Down goes a MAGLINER



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street" devoid of automobiles. Mall or walks between stores are landscaped and equipped with benches to give a park-like effect. Overhangs offer protection from sun and bad weather.

Catering to the Customer

Everything possible is done to make shopping pleasant and comfortable. Full advantage is taken of all the newest developments in design. For instance, in Bergen Mall, Paramus, N.J., Stern Brothers Department Store has the new Swiss-invented air curtains installed at each end of a two-story-high, glass-enclosed court, on the south facade of the building. The largest in the United States, each curtain is 20 feet wide and is composed of air streams that move vertically from top to bottom and keep out all insects and dust. Doors over the air curtains are used only at night or when outside weather conditions are extreme.

Customers park their cars in a huge space surrounding buildings and mall. Incoming and outgoing motor traffic moves along a perimeter road separated from the store group by parking spaces. Trucks enter a basement-level tunnel to make deliveries, out of sight of the customers.

Suburban informality of dress reigns

WHY SHOPPING-CENTER STORES COST LESS TO RUN

Over-all, the operating costs of the store in the shopping center are lower than those of a store in a downtown district. Here is a rundown of some of the reasons for the difference:

RENT: Perhaps a trifle less expensive in shopping centers than in comparable new downtown plants. But generally higher than rents in comparable old, established sites downtown.

DELIVERIES: Much less in demand at shopping centers than at downtown stores.

RETURNS OF MERCHANDISE: At shopping centers generally lower, particularly on big-ticket items, than at downtown stores due to tendency of whole family to share in original selection.

PILFERAGE AND CREDIT LOSSES: Much lower in shopping centers than downtown.

ADMINISTRATIVE CHARGES: *(department stores)*: Since shopping center branches are at present satellites of the downtown stores, much of this cost tends to be absorbed. Decentralization would change this.

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Manifestation of
Matchless
Muscularity

HUMAN DUMB-BELL

USED IN HERCULEAN
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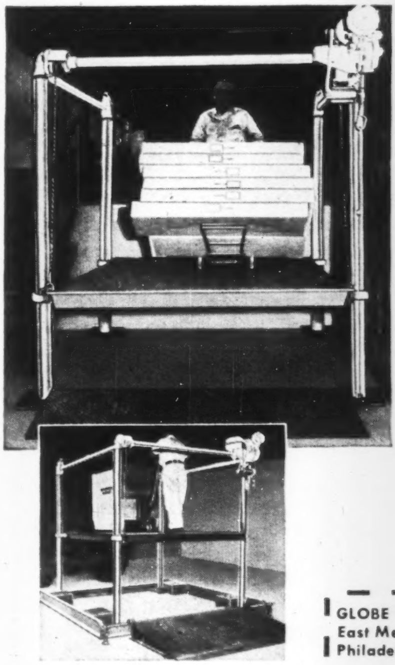
Lifting power for the Electro-Loader is supplied by a weather-protected electric motor operating a simple cable mechanism. Adjustable automatic top and bottom limit tops, a slack cable shut off, centrifugal governor and safety brake assure accurate control, smooth operation and complete safety throughout the entire lifting cycle.



GLOBE HOIST COMPANY DR-916-EL
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Philadelphia 18, Pennsylvania

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(describe application intended)

NAME ....

COMPANY ....

ADDRESS ....

CITY .... STATE ....

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East Mermaid Lane at Queen Street
Philadelphia 18, Pennsylvania

Coming next month

GOODS ON THE MOVE

In the June issue, reader attention will be focused on transportation. For months, DR&MI editors have been digging up facts through surveys, round-table discussions, and field interviews to bring you an up-to-date report on the way industry moves its goods today.

Better Transportation Is Up to Management

Improvements in transportation make it possible for companies to improve the efficiency of their working capital. Case histories will show how companies cut costs, sharpen services.

The Management Transportation Team

How up-to-date traffic departments are giving better service today. Ideas for increasing sales through better customer relations and boosting profits through lower costs.

Roads and Rails

New equipment, services, and techniques these carriers can offer shippers.

Airways and Waterways

Changes in air and water transport that are bringing better service at lower cost.

Companies Hit the Road

How company trucks and cars are used. Here are the facts on maintenance, depreciation, and leasing.

Don't miss this major editorial feature in the June issue of

DUN's REVIEW
and Modern Industry

in this garden-like approach to retailing. Because of its easy accessibility for cars, the shopping center can play host to a mother accompanied by her offspring, an advantage over downtown shopping districts the mother fully appreciates. It easily compensates for the suburban center's admittedly more limited selections.

Since it is so near at hand, whole families like to shop together at the center. To encourage this practice, centers have taken to multiple evening hours. Many have as many as three late nights a week, and some have even more.

This, then, is the downtown retailer's adversary. Once the downtowners took the measure of the shopping center, they swung into action. At first they tended to concentrate on cooperative advertising campaigns, with the metropolitan dailies setting up special group programs for them.

Knowing that the best way to draw a customer is to offer a price, merchant groups in Memphis, Phoenix, Pittsburgh, Baltimore, Denver, and Louisville launched area-wide bargain promotions designed to pull customers downtown. Gimmicks galore were the rule.

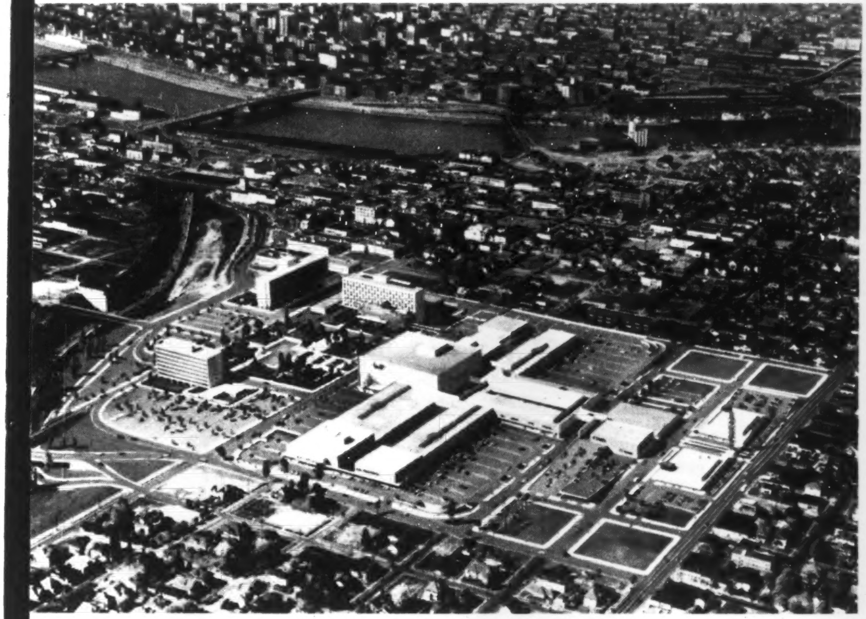
In Pittsburgh, "Golden Triangle" merchants staged a "Golden Triangle Days" bargain event. They even arranged for the local transit company to give their customers free rides home during the promotion. Typical bargain was one store's offer of flannel sports shirts for $1.

Detroit storekeepers threw a three-day Downtown Detroit Days wingding. Sales soared. Milwaukee retailers staged four such downtown promotions in one year.

Fly in the Ointment

But there was a joker in all this ballyhoo. Take, for instance, the effect of a push in Oklahoma City. Merchants there set up a weekly "holiday" drawing and offered $1,000 in cash or a free vacation in the Caribbean area. All a winning ticket holder had to do to collect his prize was to be physically present in a downtown store when the drawing took place. Results were announced over a monster public address system linking 54 stores. As far as traffic was concerned, the drawing was a huge success. Stores were jammed. When the big moment drew near, street traffic froze.

And this was the impression people undoubtedly took home with them—crushing crowds and strangled traffic. Except for the offer of pie in the sky,



SHOPPING CENTER COMES TO TOWN: Suburbia is the natural habitat of the shopping center. But Lloyd Center (above) is going up just across the river from downtown Portland, Ore., in the midst of a residential section. John Graham designed the new center.

who would deliberately subject himself unnecessarily to such an experience twice?

Downtown proprietors saw the need for more enduring inducements. So while they plugged their larger selections, many embarked on major remodelings. Full-view glass fronts replaced drab exteriors. Fluorescent lighting, new furniture, and display fixtures were installed in all kinds and sizes of stores to make shopping downtown pleasanter.

Accessibility was the big group target. Cities like New York and Chicago set up one-way signs on many streets to speed traffic. Los Angeles built tunnels for its buses. But parking was the most urgent need.

Large stores, like ZCMI in Salt Lake City and J.L. Hudson Company in Detroit, erected huge multi-story parking garages either connected to or a short distance from their store plants. Private money put up six similar garages in Oklahoma City. Joske's in San Antonio turned two nearby blocks into a parking lot. Miami Beach bought up vacant lots and metered them. Nearby Miami sprouted a 5,000-car Orange Bowl lot with transit connections to the downtown shopping district. In Youngstown, merchants arranged for customers to receive 25-cent credit stamps against 35-cents-an-hour parking charges. Hammond, Ind., retailers formed a parking corporation and built their own lots.

Recognizing the attraction of the suburban centers for family shopping, the Hammond retail community sponsored "Family Day" promotions on Saturdays. Throughout the country, downtown stores began aping shopping center night openings in a further bid for this family trade.

Though energetic, these efforts were inadequate. Of late, large-scale municipal action has been coming into the picture. Under Federal slum clearance programs, whole new areas are being developed as modern residential and commercial centers. New high-speed arteries are expected to ease traffic.

Kansas City, for example, recently opened its Sixth Street Freeway, part of a loop that will eventually circle the business district. From it, a network of roads and ramps will make an orderly path downtown. Downtown itself will be fringed by new apartment houses within walking distance of the stores. Motor hotels and modern business buildings are planned for the area.

Similar steps are being taken in Pittsburgh, Newark, N.J., and Rochester, N.Y. The story is being repeated in Detroit, Philadelphia, Chicago, and many other municipalities.

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their downtown areas into the very image of shopping centers. These programs call for the conversion of major streets into pedestrian malls and for building peripheral roadways and special parking facilities.

For sheer scope, the plans of architect Victor Gruen and city officials for Fort Worth, Texas, are hard to beat. Their proposals call for conversion of the entire downtown district into a huge pedestrian island. A multi-lane road system around the district will feed six peripheral parking garages. Each garage will hold an average of 10,000 autos on four floors. Delivery trucks and taxis will use a tunnel to service the district. Special roads will enable buses to penetrate at three points to depots near the core.

The idea of converting a major downtown street to a pedestrian mall is very much alive elsewhere, too. Oklahoma City is developing its Couch Drive into a parklike pedestrian walk. Detroit's city fathers are seriously considering the conversion of three blocks along Woodward Avenue into a pedestrian mall. In Newark, N.J., the idea of turning Halsey Street into a shopping mall, complete with an upper-level pedestrian concourse, has also been suggested.

Thus downtown is in effect moving to join the shopping center—or at least meet it on its own terms.

What the over-all effect of these measures has been nobody can yet say. For one thing, most of the major changes in the central cities are still in the making. For another, figures are not yet available to show what has happened to sales volume since 1954.

Smaller Piece of Pie

Downtown merchants are convinced that their efforts can recoup lost business, even increase their total business. This may be so, but economists don't think the cities will ever be able to absorb anything like the amount of new volume that has and will be created in their metropolitan areas. So, as the total pie enlarges, the central city's share is expected to become proportionately smaller.

Why? Because the people who are adding to the population are settling outside the cities. They are doing this not only because they want to live in a more hospitable environment but also because there simply is no room for them in the cities. The metropolis is pretty well saturated. New families must look to the suburbs for living space.

The suburbs really got their start at the turn of the century with the development of the interurban trolley. Detroit's automobiles matured just in time to help World War I's ex-doughboys and their new families escape into the countryside.

At Sears, Roebuck & Company, Robert Wood saw the handwriting on the wall when automobile registrations began to outpace downtown parking space. From that point on, he planted his new stores well out, in greener fields. Other downtown stores began to set up branches in the new, plushy little suburbs.

But as these communities built up, other retailers plumped down willy-nilly alongside the early birds. Before they knew it, they had created new downtowns, complete with over-trafficked Main Streets and no place to park.

The Great Depression and World War II froze the situation.

When the curtain came up on the second suburban boom, factory workers added their numbers to the burgeoning commuter population. They came out to live near the new one-story manufacturing plants that cropped up in the countryside. By 1954, more than half of all industrial construction was taking place in the suburbs.

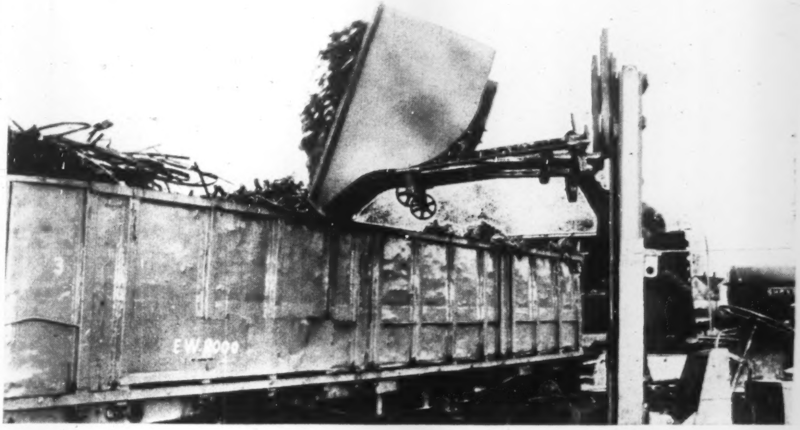
This mushrooming populace cried for stores to serve it. Venturesome retailers, reconnoitering these juicy new pickings, recalled the experiences of Suburbia's pioneers. Nichols's Country Club Plaza made much more sense to them than the helter-skelter, unplanned Main Streets.

So it was that Allied Stores Corp., desirous of a proper setting outside Seattle for a Bon Marché branch department store, commissioned architect John Graham to design a huge shopping center. Northgate opened in 1950 and set the pattern for the modern regional center.

New Market Patterns

Thus the shopping center is not really the cause of downtown Big Town's woes. It is merely the retail result of the big outward push.

What seems to be in the cards is a change in the retailing function of the central city. Patterns of population are shifting. As the young middle class stakes its claim in Suburbia, lower-income groups are beginning to concentrate in the big cities. At the same time, older couples, now wealthier and no longer in need of space for growing children, are moving back to luxury apartments in the cities.



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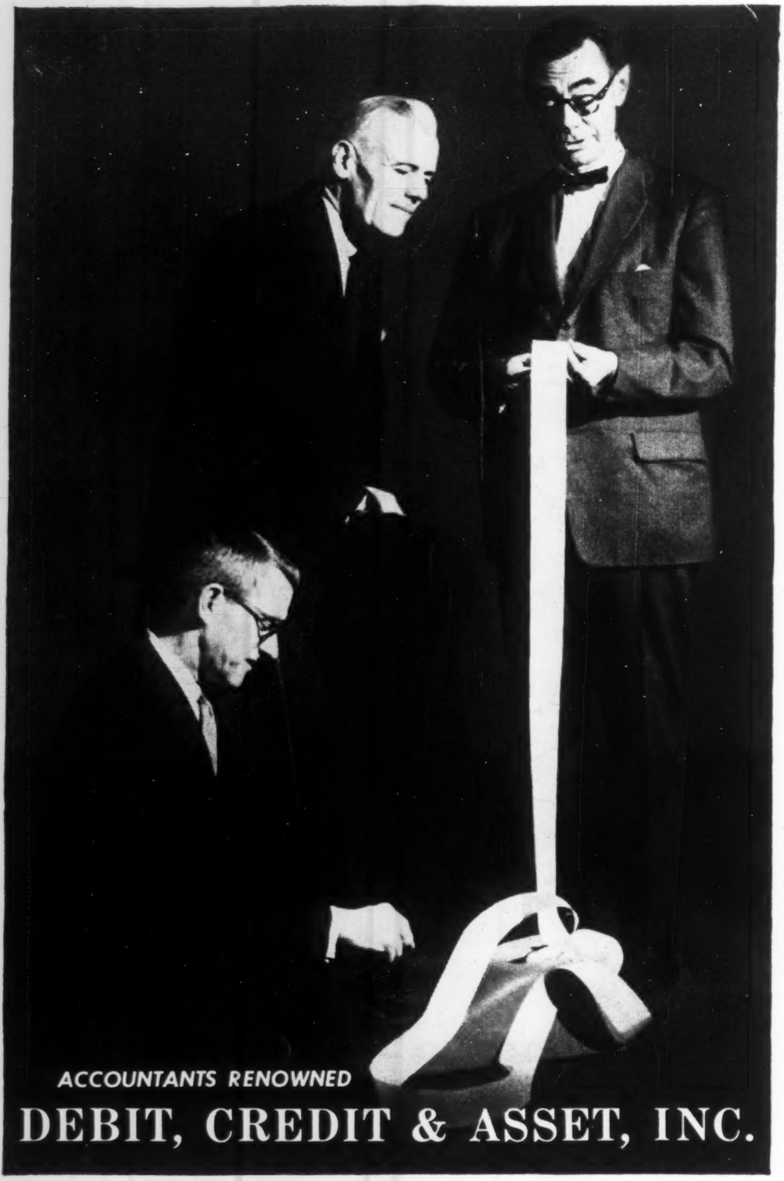

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The metropolis thus finds itself with a built-in low-price market on the one hand and a luxury-trade potential on the other. The shopping centers intensify this trend by siphoning off much of the middle, or quality-goods, market.

They draw this market partly because young homeowners demand better merchandise and partly because they must stress branded, pre-sold quality goods to win acceptance. But the suburban habit of family shopping also plays its role, according to James B. Douglas. As president of Northgate Center and executive vice president of Bergen Mall, Allied Stores' new North Jersey development, he has seen it operate this way:

"A woman who goes downtown to buy a refrigerator usually goes alone. On her own, she tends to treat the family budget very tenderly. She buys the most economical model she can find.

"But if she goes to a shopping center, she usually goes with her husband and the kids. Each one is attracted by a different flashy gadget. Mother is freed of the responsibility of guarding the budget, and group enthusiasm prevails. They invariably choose the deluxe model."

TYPICAL SPACE ALLOTMENTS

Here is a percentage breakdown of the average amount of floor space rented by various types of stores in regional shopping centers:

Kind of Store	Total Area
Department	45
Variety	3.5-10
Women's ready-to-wear	5-10
Men's clothing	2.5-5
Shoes	4-6
Supermarket	5-10
Drugs	2.1
Furniture	4
Home furnishings	2 (about)
Jewelry	0.5-1

Source: Dr. Homer Hoyt in Urban Land Institute Technical Bulletin No. 30.

On the other hand, Douglas points out, no individual shopping center can afford to maintain a worthwhile selection of luxury items like costly furs and big-ticket jewelry.

"The size of the market doesn't justify the necessary investment in inventory," he explains. "But the central downtown district, drawing from all the suburbs, can easily afford to be a luxury showcase. It gets all the suburban business in addition to the trade of the rich city residents."

To a large degree, therefore, the shopping center actually enables manufacturers to divide their volume, quality-branded, and luxury markets along geographic lines. This suggests certain advertising tactics.

In promoting brand lines, it would seem logical for the manufacturer to place much of his cooperative and national newspaper lineage in local papers. He thus benefits both from lower rates and from a receptive, avid community readership.

At the same time, he should achieve maximum results by placing ads for economy and luxury merchandise in the big-city papers. Most suburbanites take a metropolitan daily in addition to a local paper. Consequently, the country gentleman and the suburban bargain hunter can be reached with the same advertisement that attracts the city reader's eye.

Shopping centers also offer manufacturers a highly effective medium for point-of-sale promotion. They provide built-in mass audiences for special demonstrations. RCA-Victor, for one, is capitalizing on this potential with a trailer-truck exhibit of color television.

But even more ambitious projects are possible. The large centers are already old hands at staging promotional events to draw traffic. Bergen Mall, for instance, pulled large crowds with an exhibit of foreign cars. The Cross-County Shopping Center in Yonkers, N.Y., has done well with a sports festival.

If such events create excitement, a mass product exhibition, staged cooperatively by competing firms, can certainly generate business. Local retailers have been doing this sort of thing at the Hillsdale Center in San Mateo, Calif., with tremendous success. Among their hits were a vacation show, an auto show, and a variety of fashion shows.

Growing with the Suburbs

The future may give the shopping center an even more potent role in shaping the market. Its destiny is tied to the destiny of the suburbs.

To date, all signs point to the continued development of the land between the cities. By 1965, Government economists estimate, we will have an extra 25 million people, organized into 8 million new households. With no other place to go, they'll have to move into land that today is still virgin. In fact, the Government's economists expect the advance guard to begin this process only two years from now.

Three out of four families already own cars. Our current Federal highway program will eventually give these cars an extra 41,000 miles of roadway to use. So mobility will continue to increase. As this happens, any given number of people tend to use up a proportionately greater amount of land. One example is cited by Frank W. Herring, a top planning official of the Port of New York Authority.

Herring points out that between 1900 and 1940 it was necessary to build up an extra 70 square miles of open country for every million people added to the New York area. Between 1940 and 1954, an extra 185 square miles were needed to house each additional million. Herring sees this ratio getting even larger in the future.

This open, widely spaced pattern of living would seem to increase the importance of the planned shopping center as the only workable retail form. As a result, one particular shopping-center trend is highly significant—the great preponderance of chain-store tenants in the centers.

Chain stores predominate because shopping-center financiers demand the best possible risks as tenants. Large retailers obviously fill this bill much

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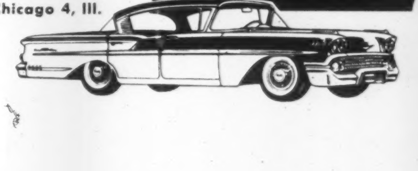

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more readily than a local one- or two-unit operator.

Many shopping-center developers are unhappy about this situation because they miss the aggressiveness and promotional initiative for which good independents are noted. Lately, in many instances, these developers have managed to win their financial backers over to this view. But nobody knows which way the wind will finally blow.

If the trend to chain-store dominance in the centers continues unchecked, it could conceivably lead to the gradual disappearance of the independent retailer.

More Decentralization?

The new, more spread-out living pattern will take large segments of the population still farther away from the old central cities. This probably means department store groups will be forced to decentralize their operations. It will no longer be possible to tie the shopping center branch store to the city store's coattails. An already-emerging trend to local buying may become the rule. Manufacturers will then have to reorganize their sales forces accordingly.

With this increasing divorcement, new population clusters may find themselves too far away to use the cities as luxury and bargain centers. In this case, we might see a limited number of specialized shopping centers, some showcasing luxury merchandise and some offering bargain-basement goods.

All these potential developments are based on the assumption that current growth projections will prove accurate. But there is always a chance they won't.

For example, these new housing developments may get so spread out that, under present local government set-ups, they won't be able to get enough tax money to finance essential community services. Troubles along this line are already cropping up. They could put a damper on further land development for housing.

Even more basic, there is no guarantee that the population will continue to multiply as estimated. The Depression scotched population growth in the 1930's. A serious decline in the economy could well have a similar, if far less devastating, effect today.

Only the future holds the true key to the ultimate destiny of Suburbia and its creature, the shopping center. But whatever happens, the centers have already made fundamental changes in the marketplace, changes that are here to stay. END

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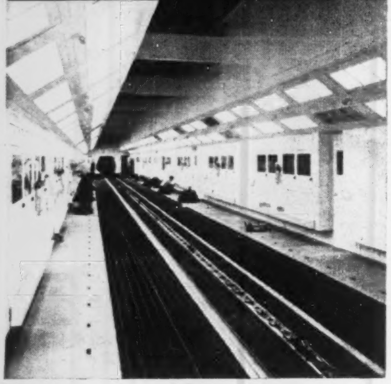
PLANET SYSTEM CUTS MAINTENANCE DOWN-TIME



Spray Booth Floor Cleans Itself

The painting operation at a leading automobile plant had to be stopped frequently to remove floor grating for cleaning because of lacquer accumulation. Planet engineers solved the problem by designing and installing a 3,400 foot multi-story slat conveyor with a self-cleaning walkway. Steel grating slats mounted between two strands of roller chain move through a stripping tank under the floor to provide a clean, safe walking surface. Because of the very slow speed of the conveyor, there is no sensation of moving. This Planet solution has resulted in a substantial savings in cost and time.

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The Reviewing Stand

● "Goods on the Move" is the slogan of our June Extra Emphasis Feature. Because the volume of goods on the move is a test of our economic well-being, DR&MI editors Tom Kenny and Carl Heyel have spent several months probing into the many problems of transport by keel, wheel, wing, and pipeline. Both shippers and carriers have been asking top management to pay more attention to the traffic executive and his heavy responsibility. "Delivering the goods" is more than a sales manager's figure of speech. It is the important task of thousands of men who are expected to get the finished merchandise into the hands of the consignee promptly, economically, and in good condition. Our transportation feature will reflect the ideas of about 600 executives who have answered our surveys and attended our round-table discussions.

● Despite the willingness of many companies to share technological discoveries for the good of industry in general, nearly every enterprise with a product has a secret formula, method, or component that is guarded in the company safe. Some of the secrets are as old as the mixture for the Smith Brothers' cough drop. But not even the lost formula for tempering Toledo swords could have been more carefully guarded than his own special method of barbing fish hooks is guarded today by each of three manufacturers. Al Larke is preparing an article for a forthcoming issue on the serious and sometimes ludicrous efforts made to protect these "hidden" assets.

● Late in the nineteenth century Arthur O'Shaughnessy wrote a poem containing the lines: "Yet we are the movers and shakers/Of the world for ever, it seems." Carroll Kilpatrick in the June issue of DR&MI appraises five and a half years of the Eisenhower Administration as a "business man's government." He cites a contemporary historian's description of Ike as "not an earth shaker, but an earth smoother." FDR was often called "The Old Smoothy." And Henry Clay, "The Great Pacificator," was another artist in legislative diplomacy, but he compromised too often to win the presidency. —A.M.S.

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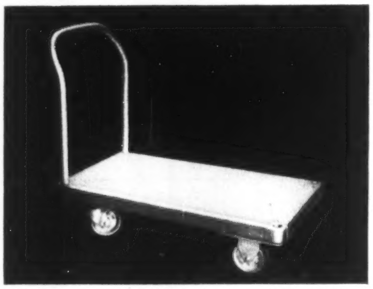

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Push the load . . . not the truck! You can't make—*or save*—a penny pushing and handling deadweight! That's why thousands of lightweight Magliner trucks are in daily use in large and small companies alike.

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Out-of-town telephone calls help raise profits, lower costs

One of the real tests of management is the ability to maintain or step up profits during changing times without resorting to false or even harmful economies.

At such times, out-of-town telephone calls may be more valuable than ever. For example:

—to keep salesmen in frequent touch with customers, at low cost

—to line up prospects and close sales fast

—to obtain credit information quickly

—to speed up shipments and all other services for customers

—to expedite all phases of administration

Out-of-town telephone calls can produce profitable economies in almost every operation of your business.

Why not check to see if your people are making full, regular use of out-of-town telephone calls to increase profit?

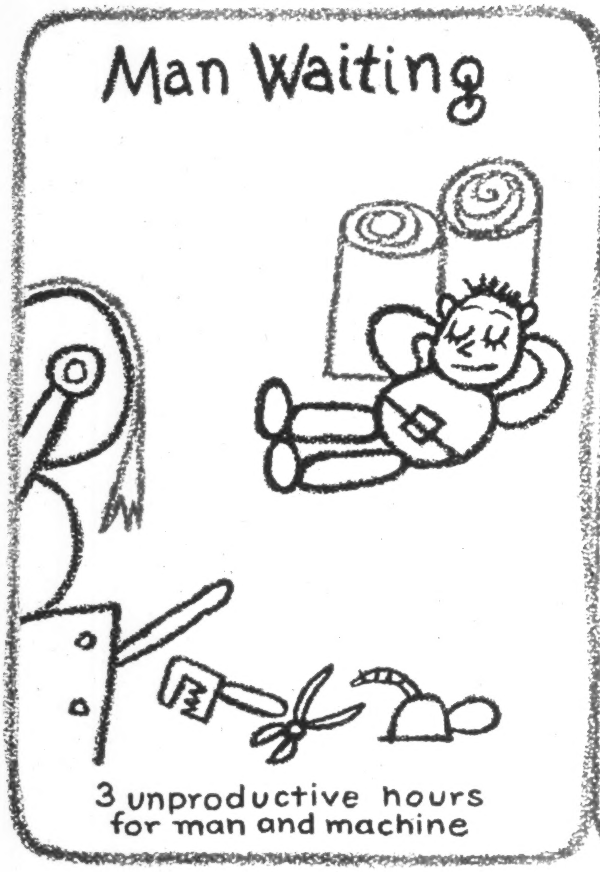
More and more companies are discovering that *it pays.*

YOU SAVE MONEY
WHEN YOU CALL STATION-TO-STATION
instead of Person-to-Person

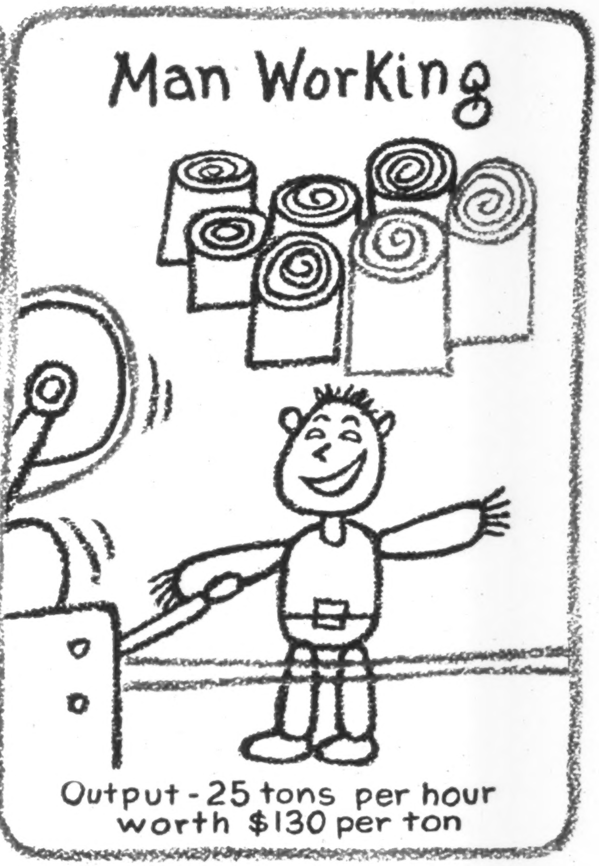
For example:	Day Rates (first 3 minutes) Person-to-Person	Station-to-Station	Each Added Minute (applies to all calls)
Buffalo to Cleveland	$1.05	75¢	20¢
St. Paul to Chicago	$1.45	$1.05	30¢
Boston to Norfolk, Va.	$1.70	$1.20	30¢
Milwaukee to Philadelphia	$2.10	$1.50	40¢
San Francisco to Detroit	$3.30	$2.35	60¢

Add 10% Federal Excise Tax

BELL TELEPHONE SYSTEM



In the past, production losses due to breakdown of dryer roll bearings were so small they could be made up.



Today shut down of high-speed machines puts production behind by hundreds of tons per hour—quickly piles up losses.

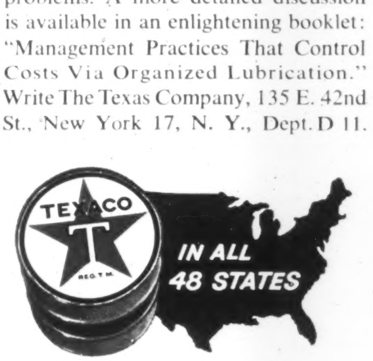
Lubricating plan cuts downtime —can save $10,000 in 3 hours

Not so long ago, machines shut down by bearing failure could make up production losses. Today volume output and integrated production mean that production losses are losses in profit. These are the reasons behind management's growing concern with lubrication methods in their plants.

Take this example from the paper industry: they used to figure $500 for a bearing, $500 for labor (idle time and repair crew) and expected to make up losses on the two or three hours downtime. Today, high speed machines produce twenty-five tons of paper per hour worth $130 per ton. You can't ignore $3,000 an hour in production losses. In this case, the cost of the bearing replacement could run as high as $10,000.

Lubrication problems differ with specific industries, but the basic principles are the same. Many companies are finding that the services of a plant lubrication engineer pay off. His services can extend part life, eliminate production losses, reduce rejects, simplify lubricant inventories and otherwise add to income. Some companies delegate lubrication responsibility to engineers or plant personnel who also perform other duties.

In both cases, Texaco's organization of Lubrication Engineers is functioning in all 48 States, as consultants in outlining a practical approach to these problems. A more detailed discussion is available in an enlightening booklet: "Management Practices That Control Costs Via Organized Lubrication." Write The Texas Company, 135 E. 42nd St., New York 17, N. Y., Dept. D 11.



LUBRICATION IS A MAJOR FACTOR IN COST CONTROL

(PARTS, INVENTORY, PRODUCTION, DOWNTIME, MAINTENANCE)